EXHIBIT P

Page 1

```
 1              UNITED STATES DISTRICT COURT
                WESTERN DISTRICT OF NEW YORK
 2

 3    - - - - - - - - - - - - - - - - - - X
       CAROL S. MARCELLIN,              : CIV. NO.:
 4     individually, and as            : 1:21-cv-00704-JLS
       Co-Administer of the Estate of  :
 5     Charles E. Hollowell, deceased, :
       and JESSICA HOLLOWELL-McKAY, as  :
 6     Co-Administer of the Estate of  :
       Charles E. Hollowell, deceased, :
 7                                       :
                           Plaintiffs,  : DEPOSITION OF:
 8                                       : DAVID PIPHO
                                         :
 9              v.                       :
                                         :
10                                       :
       HP, INC., and STAPLES, INC.,      :
11                                       :
                           Defendants.  :
12    - - - - - - - - - - - - - - - - - - X

13

14        Transcript of the stenographic notes of the

15   proceedings in the above-mentioned matter, as taken by

16   and before ToniAnn Acquaro, a professional court

17   reporter and notary public within and for the State of

18   New York, held virtually, on Wednesday, August 7, 2024,

19   commencing at 1:05 in the afternoon.

20

21

22

23

24

25   Job No. P1-6836748
```

```
                                                    Page 2

  1     A  P  P  E  A  R  A  N  C  E  S:        (Appearing virtually.)

  2

        FARACI LANGE, LLP
  3
          Counsel for Plaintiffs
  4
               1882 South Winton Road, Suite 1
  5            Rochester, New York 14618
  6     BY:    STEPHEN SCHWARZ, ESQ.
               sschwarz@faraci.com
  7
  8

        COUGHLIN BETKE, LLP
  9
          Counsel for Defendant HP, Inc.
 10
               1330 Avenue of the Americas, Suite 23A
 11            New York, New York 10019
 12     BY:    BENJAMIN LEVITES, ESQ.
               blevites@coughlinbetke.com
 13
 14
        PILLINGER, MILLER, TARALLO, LLP
 15
          Counsel for Defendant Staples, Inc.
 16
               126 North Salina Street, Suite 215
 17            Syracuse, New York  13202
 18     BY:    MARIA T. MASTRIANO, ESQ.
               mmastriano@pmtlawfirm.com
 19
 20     ALSO PRESENT:
 21            Jessica Hollowell-McKay
               Ryan Sohmer, Legal Videographer
 22
 23
 24
 25
```

Page 3

```
 1   I N D E X

 2    WITNESS                    EXAMINATION BY           PAGE

 3    DAVID PIPHO                MR. SCHWARZ              8

 4

 5

      E X H I B I T S

 6

      PLAINTIFF'S    DESCRIPTION                          PAGE

 7

      Exhibit 9      6-Cell Battery Specification         21

 8                   for MU06062, Revision 1.3,
                     Bates stamped HP01378 through

 9                   HP01389

10    Exhibit 10     Defendant's HP Inc.'s Answer         54
                     to Plaintiffs; Third set of

11                   Interrogatories

12    Exhibit 11     August 2, 2023, Deposition           56
                     Transcript of Warren Atkinson

13
            (Exhibits to be produced with transcript.)

14

15

16

17

18

19

20

21

22

23

24

25
```

1   F E D E R A L   S T I P U L A T I O N S

2

3   IT IS HEREBY STIPULATED AND AGREED by and

4   among counsel for the respective parties hereto, that

5   the filing, sealing, and certification of the within

6   deposition be waived.

7   IT IS FURTHER STIPULATED AND AGREED by and

8   among counsel for the respective parties hereto that all

9   objections, except as to the form of the question, shall

10   be reserved to the time of the trial.

11   IT IS FURTHER STIPULATED AND AGREED that the

12   within deposition may be sworn to and signed before any

13   officer authorized to administer an oath, with the same

14   force and effect as if signed to before the Court.

15   IT IS FURTHER STIPULATED AND AGREED by and between

16   counsel for all parties present and pursuant to C.P.L.R.

17   Section 3113(d), this deposition is being conducted by

18   video conference, that the court reporter, all counsel,

19   and the witnesses are all in separate remote locations

20   and participating via video conference, that the officer

21   administering the oath to the witness need not be in the

22   place of the deposition and the witness shall be sworn

23   in remotely by the court reporter after confirming the

24   witness's identity; that this video conference will not

25   be recorded in any manner and that any recording without

Page 5

1 the express written consent of all parties shall be

2 considered unauthorized, in violation of law, and shall

3 not be used for any purpose in this litigation or

4 otherwise;

5   IT IS FURTHER STIPULATED AND AGREED that

6 exhibits may be marked by the attorney presenting the

7 exhibit to the witness, and that a copy of any exhibit

8 presented to a witness shall be e-mailed or otherwise in

9 the possession of all counsel prior to any questioning

10 of a witness regarding the exhibit in question.

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Page 6

1   THE VIDEOGRAPHER: Good

2   afternoon. We are now going on the

3   record at 1:05 P.m. Today's date is

4   August 7, 2024.

5   Please note that the

6   deposition is being conducted

7   virtually. The quality of recording

8   depends on the quality of camera and

9   internet connection of participants.

10   What is seen from the witness and

11   heard on screen is what will be

12   recorded. Audio and video recording

13   will continue to take place unless

14   all parties agree to go off the

15   record.

16   This is media unit one of

17   video-recorded deposition of David

18   Pipho taken by counsel for the

19   plaintiff in the matter of Carol S.

20   Marcellin v. HP, Inc. and Staples

21   Inc., in the United States District

22   Court of Western District of New

23   York, Case No. 1:21-cv-00704-JLS.

24   This deposition is being

25   conducted remotely using virtual

Page 7

1   technology.

2   My name is Ryan Sohmer, I

3   represent Veritext Priority One, I

4   am the videographer. The court

5   reporter today is ToniAnn Acquaro,

6   also from Veritext Priority One.

7   I'm not authorized to

8   administer to administer an oath.

9   I'm not related to any party in this

10   action, nor am I financially

11   interested in the outcome.

12   If there are any objections

13   to proceeding, please state at the

14   time of your appearance.

15   Counsel and all present,

16   including remotely will now state

17   their appearances and affiliations

18   for the record, beginning with the

19   noticing attorney, after which our

20   court reporter will swear in the

21   witness and you may proceed.

22   MR. SCHWARZ: Sure. Steven

23   Schwarz, Faraci Lange on behalf of

24   the plaintiffs.

25   MR. LEVITES: Benjamin

Page 8

1   Levites, Coughlin Betke on behalf of

2   HP.

3   MS. MASTRIANO: Maria

4   Mastriano from Pillinger Miller

5   Tarallo, LLP, on behalf of Staples.

6   D A V I D   P I P H O, of 144111 Timbergreen

7   Drive Magnolia, Texas, 77355 after having

8   been duly sworn, was examined and testified

9   as follows:

10   EXAMINATION

11   BY MR. SCHWARZ:

12   Q.   Good afternoon, Mr. Pipho. My name is

13   Steve Schwarz. I'm the attorney for the plaintiffs as

14   I just announced and I will be asking you the questions

15   today.

16   My first question is: Have you ever been

17   subjected to a deposition before?

18   A.   I have.

19   Q.   And can you tell me how many times?

20   A.   Once.

21   Q.   Can you give me a summary of what type of

22   case that was that you testified in?

23   A.   It was related to notebook computers.

24   Q.   And what was the factual situation with

25   regard to that litigation; in other words, what about

Page 9

1   notebook computers?

2   A.   The electrical design of notebook

3   computers.

4   Q.   Was it a personal injury, a wrongful

5   death case or was it a patent case or was it some

6   other?

7   A.   Actually, I don't recall the details of

8   the case.

9   Q.   What was your role in that case?

10   A.   Providing expertise on electrical design.

11   Q.   So you have been through this process

12   before. You understand that you have to try to give

13   all answers verbally and not shake your head or make

14   gestures so the court reporter can take it down. We

15   want to try to do our best that I'll try not to talk

16   over you and you should try not to talk over me so the

17   court reporter has a clean record and she can take down

18   everything we say, okay?

19   A.   Okay.

20   Q.   We can take a break whenever you want to.

21   We'll probably take a break at least every hour, but if

22   want to take a break sooner than that, just let us

23   know, you'll just have to answer the question that is

24   pending, okay?

25   A.   Okay.

Page 10

1   Q.   Did you do anything to prepare yourself

2   to give testimony today?

3   A.   I guess just understanding, reviewing the

4   statement that I had previously made, but the -- the

5   scope, from what I understand of this, is pretty

6   limited. Based -- it's based on previous discussions

7   with Lee. So, yeah, very limited, just trying to

8   recall discussions with him.

9   Q.   And by Lee you are talking about

10   Mr. Atkinson?

11   A.   Correct.

12   Q.   And did you review Mr. Atkinson's

13   testimony?

14   A.   No.

15   Q.   You did not, that's correct?

16   A.   Correct.

17   Q.   Well, we're going to review it together

18   so that will be your opportunity to do it, I guess.

19   You weren't so that will read Mr. Atkinson's testimony

20   before you signed an affidavit in this case?

21   A.   No.

22   Q.   So you have no idea as to what

23   Mr. Atkinson testified to with regard to his

24   discussions with you?

25   A.   Only the general topic.

Page 11

1   Q.   And what was that general topic as you

2   were told?

3   A.   Battery counterfeit.

4   Q.   Can you summarize for us your education

5   after high school?

6   A.   Sure. I went to Devry Institute of

7   Technology in Irving, Texas, and have an Associate's of

8   Applied Science in Electronics.

9   Q.   Okay. After you'd completed your

10   education where the first place you worked?

11   A.   The first place I worked was Advanced

12   Surveillance Technologies in the Dallas, Texas, area.

13   Q.   And what was the nature of your job at

14   that employer?

15   A.   It was assembling camera surveillance

16   systems.

17   Q.   How long did you work there?

18   A.   Approximately six months.

19   Q.   And where is the next employment you had

20   professionally?

21   A.   It was professionally, it would have been

22   in Houston at Compact Computer Corporation.

23   Q.   And what was your roll at Compact when

24   you started there?

25   A.   Electronic technician repairing

Page 12

1   motherboards, computer PC motherboards.

2   Q.   How long did you work at that position at

3   Compact?

4   A.   It was from '94 to 2000 in that role.

5   Q.   And were you in the same position from

6   '94 to 2000 with Compact?

7   A.   Yes.

8   Q.   And what happed in 2000 then? What did

9   you do then?

10   A.   Moved to a Notebook engineering group,

11   testing Notebook peripherals.

12   Q.   Was that still with Compact?

13   A.   Correct.

14   Q.   And when you say testing Notebook

15   peripherals can you explain that in layman's term, what

16   is that?

17   A.   Any kind of accessories that we offered

18   commercially at the time. So memory upgrades, external

19   drives, things like that.

20   Q.   What about batteries, were you involved

21   in batteries at all?

22   A.   No.

23   Q.   After you took on that position at

24   Compact in about 2000, what is the next thing you did

25   after that?

Page 13

1   A.   I moved to the quality organization,

2   supporting failure analysis of field issues.

3   Q.   What is failure analysis?

4   A.   It's trying to understand the root cause

5   of the issue.

6   Q.   And in your failure analysis work, did

7   you look at any battery failures?

8   A.   Typically not. They would go to a

9   different -- a different team. If it were related to

10   the electrical design, maybe the charging of the

11   system, I maybe involved, but not within the battery

12   itself.

13   Q.   How long did you work in the quality

14   department at Compact until you took on another

15   position?

16   A.   I am actually still in the quality roll.

17   Q.   Okay --

18   A.   Now.

19   Q.   At any point was Compact acquired by

20   Hewlett Packard?

21   A.   Yes.

22   Q.   And when was that?

23   A.   It was around 2000 when I was in the

24   accessories group.

25   Q.   And have you remained then in the quality

Page 14

1   department at HP then since HP acquired Compact?

2   A.   That's correct.

3   Q.   So that would be somewhere around 24

4   years?

5   A.   Yes.

6   Q.   And has your -- what is your title in the

7   quality department?

8   A.   It's still electrical engineer. I had

9   moved to a people manager role for a period of time,

10   but then back to electrical engineer.

11   Q.   And are you still doing failure analysis

12   then?

13   A.   Yes.

14   Q.   What is the -- the mission or the charge

15   of the quality group at HP that you work in; in other

16   words, what do they do?

17   A.   It is to ensure that our customers are

18   supported with any kind of problems that may arise with

19   their PCs.

20   Q.   Now, in your career at HP and Compact and

21   in your education, have you become familiar with the

22   fire hazard that can occur with lithium ion batteries

23   when they overheat and can enter a condition called

24   thermal runaway?

25   MR. LEVITES: Objection.

Page 15

1   David, you can answer.

2   A.   Yes, I'm generally aware of the issue.

3   Q.   And how did you become familiar with that

4   issue?

5   A.   Mainly from industry knowledge.

6   Q.   And what do you mean by that?

7   A.   Reported issues in the industry of

8   the -- the fires that have occurred, and the inherent

9   technology limitations and what those can lead to.

10   Q.   And have you had any background in the

11   various safety devices that are designed into battery

12   packs to try to prevent those sorts of thermal runaway

13   situations with lithium ion batteries?

14   MR. LEVITES: Objection.

15   You can answer.

16   A.   I am aware, in general, of some of the

17   features within the batteries.

18   Q.   And have you performed any of your

19   failure analyses on those types of safety features of

20   lithium ion battery packs?

21   A.   I have not. As I previously indicated,

22   we would have focus on the design of the failure

23   analysis within the system itself.

24   Q.   And when you say the "system itself," can

25   you describe what you mean by that?

Page 16

1   A.   Typically the system board.

2   Q.   The system board is that the motherboard?

3   A.   Correct.

4   Q.   So that would be the motherboard of the

5   computer as opposed to the integrated circuitry in the

6   battery pack, correct?

7   A.   That's correct.

8   Q.   Are you familiar with the connections of

9   the motherboard to the battery pack?

10   A.   Yes.

11   Q.   And are you familiar with the safety

12   system that HP has used of a thermistor that is

13   directly connected and reports to the motherboard?

14   MR. LEVITES: Objection.

15   David, you can answer.

16   A.   I don't know that I have heard the term

17   thermistor, but I am aware that the temperature is

18   reported from the battery back to the system.

19   Q.   And is that -- that relationship and

20   the -- the system of reporting the temperature of the

21   battery cells to the motherboard is that something that

22   you have worked on with regard to failure analysis?

23   MR. LEVITES: Objection --

24   A.   No --

25   MR. LEVITES: You can answer,

Page 17

1   David.

2   A.   -- it's not.

3   MR. SCHWARZ: Could you put

4   on the record please, what your

5   objection is, Ben, so I can

6   understand that.

7   MR. LEVITES: It's to the

8   form of the question.

9   MR. SCHWARZ: Yes. What was

10   wrong with the form of the question

11   is what I'm asking so I can correct

12   it and not make that mistake again.

13   MR. LEVITES: It was just

14   confusing, compound.

15   MR. SCHWARZ: Okay.

16   Q.   Are you familiar with --

17   THE COURT REPORTER: Excuse

18   me. There was no answer.

19   MR. SCHWARZ: Oh, I think he

20   said no, but -- can you read the

21   question back, ToniAnn?

22   (Whereupon, the pending question was read

23   back.)

24   Q.   So let me just ask the question again.

25   Have you looked at any failure analysis

Page 18

```
1    or have you done any failure analysis with regard to

2    that system of the temperature of the battery cells

3    being reported to the motherboard?

4         A.    No.

5         Q.    Are you familiar with the programming

6    within the motherboard as to what happens when the

7    temperature exceeds the threshold value in the battery

8    cells?

9         A.    I am somewhat aware.

10        Q.    Are you familiar with something called an

11   internal controller?

12        A.    I have not heard that particular

13   terminology before.

14        Q.    My understanding, again from

15   Mr. Atkinson's testimony and from the interrogatory

16   answers that have been provided by HP, that if the

17   thermistor in the battery pack reports a temperature of

18   46 degrees celsius or higher to the motherboard, the

19   motherboard has the capacity of turning the power off

20   to the battery pack.  Are you familiar with that?

21                   MR. LEVITES:  Objection.

22                   Can you answer, David.

23        A.    Generally, but not the specifics such as

24   the temperature that you mentioned.

25        Q.    Okay.  But you know that there is some
```

Page 19

1   threshold temperature above which if that is reported

2   to the motherboard for some period of time, that the

3   motherboard has the capacity to turn the power off to

4   the battery pack?

5   A.   Yes.

6   Q.   And how did you become familiar with that

7   particular aspect of the HP computer, laptop computer,

8   systems?

9   MR. LEVITES: What laptop

10   systems are we talking about, Steve?

11   MR. SCHWARZ: Well, any

12   laptop systems.

13   A.   I don't recall. Over time I became

14   familiar.

15   Q.   Okay. Have you --

16   A.   I don't recall anything specific.

17   Q.   Have you analyzed that particular aspect

18   in any of your failure analysis work?

19   A.   I have not.

20   Q.   Are you familiar with any other safety

21   devices that HP has, requires of its battery packs, or

22   has programmed into its motherboard to prevent lithium

23   ion battery failures resulting in fires?

24   A.   I'm generally aware.

25   Q.   And what are you generally aware of with

Page 20

1   regard to what HP has either required in its battery

2   packs manufactured by authorized manufacturers or has

3   programmed into its own system motherboard?

4   MR. LEVITES: Are we still

5   talking about all computers, or?

6   MR. SCHWARZ: I just want to

7   know what he is familiar with, Ben.

8   A.   In general that there is a

9   battery-management unit that has various safety

10   thresholds that prevent conditions from occurring that

11   shouldn't -- would potentially result in any kind of

12   problem for the battery.

13   Q.   Okay. And one problem for the battery

14   that we are talking about is -- is a fire, correct?

15   A.   Correct.

16   Q.   Are you familiar with the cell balance

17   feature that's programmed into the battery packs and

18   required of HP of its manufacturers' battery packs?

19   A.   Not in detail.

20   MR. LEVITES: Objection.

21   Q.   Do you know what that refers to, cell

22   balance?

23   A.   Yes.

24   Q.   What is your understanding of what cell

25   balance refers to?

Page 21

1   A.   My understanding is that it's intended to

2   ensure that the voltage levels of each cell don't

3   deviate significantly from one other.

4   Q.   And are you familiar with the concept of

5   overcharging a lithium ion battery?

6   A.   Yes.

7   Q.   And that the consequences of that can be

8   an overheating scenario?

9   A.   Yes.

10   Q.   Are you familiar with -- with something

11   referred to as a fuel gauge that is a part of the

12   battery pack integrated circuitry?

13   A.   Yes.

14   Q.   And do you understand what the fuel

15   gauge's role is in managing the battery system?

16   A.   In general. It's the -- what we

17   generally refer to the BMU, the battery management

18   unit.

19   Q.   Okay. All right. I'm going to now share

20   my screen.

21   Can you see that?

22   A.   Yes.

23   (Whereupon, Plaintiff's Exhibit 11, August

24   2, 2023, Deposition Transcript of Warren

25   Atkinson, was marked for identification.)

Page 22

1   Q.   I've marked as Exhibit 11 in this case,

2   the transcript of Mr. Atkinson from his deposition in

3   this case. And I'm now on page 98 of that transcript,

4   and I want to read to you his testimony and ask you

5   some questions about it.

6   Before I start reading, I just want to

7   clarify again. You have never read his testimony or

8   had his testimony read to you at any time?

9   A.   No.

10   Q.   So I ask Mr. Atkinson on page 98, line 7.

11   Question: Just so that I am clear, your

12   efforts to do this, this process of investigating

13   unauthorized battery packs for use in the HP Pavilion,

14   was that done for purposes of litigation only.

15   And his answer was yes.

16   Now my first question to you then,

17   getting away from the transcript, are you familiar with

18   that term "unauthorized battery packs"?

19   A.   I am.

20   Q.   And what does that term mean to you?

21   A.   To me it means that it is not an HP

22   design or adheres to the necessary or implements the

23   necessary safety features.

24   Q.   So you have an understanding that HP has

25   outside manufacturers that manufacture its battery

Page 23

1   packs; is that correct?

2   A.   That's correct.

3   Q.   And HP has specifications that those

4   outside manufacturers must follow in regard for it to

5   be an authorized HP battery pack?

6   A.   Correct.

7   Q.   And those specifications include the

8   safety devices that are required by HP to be built into

9   the battery packs in order for them to be authorized?

10   A.   I would expect so, yes.

11   Q.   And some of those safety features are

12   designed to prevent overheating of batteries and

13   potential thermal runaway of the lithium ion battery

14   cells, correct?

15   A.   Yes.

16   Q.   Going back to Exhibit 11, the transcript,

17   starting on line 13, still on page 98.

18   Question: So other than your efforts to

19   study unauthorized battery packs and whatever

20   functionality they had that you did in litigation, you

21   are not aware of any similar process going on within HP

22   where unauthorized battery packs were being studied for

23   purposes of, say, safety and warning consumers not to

24   use these products.

25   Answer: Well, I am not aware of any

Page 24

1   other study with an HP for these other -- for these

2   other battery packs.

3   Questions: Right.

4   Have you --

5   Did you inquire as to whether --

6   And then I stop.

7   Now, on page 99, line 1.

8   Question: Did you take any action in

9   preparation for today to find out whether there was

10   some other unit within HP that was doing that function

11   outside of purely for litigation.

12   And Mr. Betke had a question -- had a

13   question saying "Or would you know as part of your

14   work?"

15   And then Mr. Atkinson answered: I am not

16   aware of any or study for -- any other study on

17   unauthorized battery packs.

18   Question: But my question is did you

19   inquire of anyone else in the company to find out if

20   there was something you are aware of that is

21   actually -- I'm sorry, something you are unaware of

22   that is actually occurring with these unauthorized

23   battery packs are being the studied for purposes other

24   than litigation?

25   Did you inquire of anyone about that

Page 25

1   topic?

2   Answer: No, I've had discussions with

3   other people on this, but I am not aware of any other

4   activity that actually -- to actual analyze these

5   battery packs.

6   Question: When you say you've had

7   discussions, again, I don't want to know any

8   discussions you've had with lawyers, but, in other

9   words, have you had any discussion within the company

10   generally outside of the litigation process about the

11   potential hazards associated with using these

12   unauthorized battery packs because they lack certain

13   safety features?

14   Answer: Yes.

15   Question: And when did you have these

16   conversations and with whom again outside of litigation

17   context.

18   Answer: The question about how we can --

19   about what we might be able to do to discourage use of

20   third-party batteries.

21   Question: Yes.

22   So that's what I understood the concept

23   was, but my question is, who did you discuss that with

24   and when.

25   Answer: I talked to few people over the

Page 26

```
 1    last four years on this.  The last four years on this.
 2                   Question:  So, we have when.
 3                   Who were the few people that you talked
 4    to.
 5                   Answer:  Another person who -- I have to
 6    name a name, David Pipho.
 7                   Question:  Do you know how to spell that,
 8    please?
 9                   Answer:  P-I-P-H-O.
10                   Question:  Where in the HP system is
11    Mr. Pipho housed?
12                   Answer:  We works in quality, HP quality
13    group.
14                   Question:  Where is that located?
15                   Answer:  In Houston.
16                   Now, Mr. Pipho, the reason that you're --
17    we asked to depose you is to ask you about both the
18    conversations you had with Mr. Atkinson on this topic
19    and any other knowledge you have on this topic.
20                   You've -- you've signed an affidavit
21    saying you have no recollection of ever talking to
22    Mr. Atkinson about this topic except a very vague
23    recollection.  Is that still your testimony under oath
24    today?
25          A.    Yes.
```

Page 27

```
1                          MR. LEVITES:  Steve, before

2               we go on, I want to point out it's

3               peep-POE, not PEEP-poe.

4                          MR. SCHWARZ:  Can you say

5               that again, because I think I

6               screwed that up.

7                          MR. LEVITES:  No problem.

8               It's peep-POE.  It's a hard second

9               P.

10                         MR. SCHWARZ:  Peep-POE.

11                         MR. LEVITES:  Correct.

12              Right, David.

13                         THE WITNESS:  That's correct.

14                         MR. SCHWARZ:  I'm sorry.  My

15              apologies for that.

16         Q.    I'm going to continue on now to page 101.

17                    Question:  Can you recall the name of

18      anyone else that you had this conversation with?

19                    Answer:  Yes.  With -- no, I'm trying to

20      remember specifically.  I can't remember a name that --

21      I'm trying to remember a specific conversation that I

22      had with someone, but at least I am trying to remember

23      a specific discussion.

24                    Question:  You are having trouble

25      remembering who you talked to.
```

Page 28

1   Answer: Yeah. I am trying to put in

2   context -- I'm trying to remember a specific

3   conversation and how and what exactly we talked about.

4   Question: So, the only name you can give

5   me is Mr. Pipho.

6   Answer: Yes. Right now, yes.

7   Question: With regard to your

8   discussions with Mr. Pipho, do you know if any action

9   was taken by HP to further those discussions after you

10   had the discussion with Mr. Pipho?

11   Answer: I don't know if there -- I don't

12   know if there is anymore further action. No, I don't

13   know.

14   Question: Do you remember why it was

15   that you chose Mr. Pipho to discuss this particular

16   topic with?

17   Answer: I am aware of other incidents we

18   had with aftermarket batteries or third -- or

19   unauthorized batteries.

20   Question: I am sorry. I didn't catch

21   your answer.

22   You are saying that you knew he was aware

23   of that problem as well.

24   Answer: Yes.

25   And how did you understand that he was

Page 29

1   aware of this problem in addition to you being aware of

2   it?

3   Answer: I don't know.

4   Question: Did you communicate with

5   Mr. Pipho any of the knowledge that you had gained from

6   your analysis of the unauthorized battery packs in

7   litigation?

8   Answer: Litigation, yes. Roughly.

9   Question: So in other words, you gained

10   certain knowledge from your work on a particular legal

11   case about the functionality or lack of functionality

12   of some of these unauthorized battery packs and that

13   information you then used to have this discussion with

14   Mr. Pipho?

15   Answer: Yes.

16   Question: And your goal in doing that

17   was to see if there was something that HP could do to

18   prevent those types of unauthorized battery packs that

19   lacked that functionality from operating in the HP

20   systems?

21   Answer: Yes.

22   Question: Did you have this discussion

23   with Mr. Pipho one time or multiple times?

24   Answer: Probably multiple times.

25   Question: And did Mr. Pipho ever

Page 30

1   communicate back to you what, if anything, he or others

2   at HP were doing to address the concerns that you had

3   raised?

4   Answer: We discussed ideas about what

5   might be possible, yes.

6   Question: Did you communicate with

7   Mr. Pipho information about the lack of safety

8   functionality you were finding inside of these

9   unauthorized third-party battery packs?

10   Answer: I did.

11   Question: And what did you convey to him

12   on that topic?

13   Answer: That these battery packs are

14   void of even authentic reporting. That the battery

15   packs are -- some of these battery packs will sacrifice

16   multiple standard safety features.

17   Question: And some of those standard

18   safety features would be the thermal protection

19   shutdown process that we talked about?

20   Answer: Yes. The -- sacrifice almost

21   everything that HP would require for a battery pack.

22   Question: And that would include the

23   cell balancing function as well?

24   Answer: Yes.

25   Question: And even though these battery

Page 31

1   packs -- these counterfeit unauthorized battery packs

2   lacked all of those safety functions, they were still

3   able to function within the HP Pavilion Series laptops?

4   Answer: Yes.

5   And you have been aware of this and HP

6   has been aware of this you said over four years?

7   Answer: I am thinking about five or six

8   years. The prevalence of the uses has become

9   significant.

10   Question: To your knowledge has -- is

11   Mr. Pipho, did you say?

12   Answer: Yes.

13   Has Mr. Pipho communicated back to you

14   any effort within HP to provide information to

15   purchases of HP laptops of this danger that you are

16   describing of these completely functional battery packs

17   lacking all of the safety devices HP requires that

18   would work in an HP laptop.

19   Then there's some objections. He doesn't

20   answer that question.

21   I move on to when the pop-up that you

22   described -- meaning, a message that the computer

23   operator -- well, let me just stop there. Let me go

24   back.

25   So now that I read that testimony to you,

Page 32

1   Mr. Pipho, do you have -- has that refreshed your

2   recollection that you had discussions with Mr. Atkinson

3   on the topics I just read about?

4   A.   Again, very -- very vague discussions.

5   Q.   Okay. You have vague recollections or

6   very vague discussions?

7   A.   Yeah, vague recollection of discussion

8   on, you know, what could possibly be done on a system

9   level.

10   Q.   All right. So let me start with the

11   first question.

12   Before you had the discussion with

13   Mr. Atkinson, what was your level of knowledge of the

14   fact that there were unauthorized battery packs that

15   were functional in laptop HP computers that lacked the

16   safety features that HP required of its authorized

17   battery packs?

18   A.   Just a general awareness.

19   Q.   Well, how did you become generally aware

20   of that?

21   A.   Through discussions that I've overheard

22   over time, you know, being involved in the quality

23   team.

24   Q.   So the quality team at some point had

25   meetings, and in those meetings there was a discussion

Page 33

1   that there were unauthorized battery packs that were

2   functional in HP computers, but lacked certain safety

3   devices?

4   MR. LEVITES: Objection.

5   You can answer, David.

6   A.   Correct.

7   Q.   And tell me what you recall about the

8   purpose of these discussions?

9   A.   Yeah, I -- we're talking, you know,

10   maybe -- maybe 10 years ago. Yeah, I can't say I

11   recall.

12   Q.   Okay. So at least approximately 10 years

13   ago discussions occurred within the quality team of an

14   awareness that there were unauthorized battery packs

15   lacking safety features that were being used in HP

16   laptop computers?

17   MR. LEVITES: Objection.

18   You can answer, David.

19   A.   Yes.

20   MR. SCHWARZ: And what's the

21   nature of that objection, please?

22   MR. LEVITES: To the form of

23   the question.

24   MR. SCHWARZ: And what was

25   wrong with the form of that

Page 34

1   testimony?

2   MR. LEVITES: It referred to

3   prior testimony in a way that was

4   not consistent with that testimony.

5   MR. SCHWARZ: Okay. Except

6   he answered yes so I guess that

7   would overrule your objection.

8   Q.   And within the quality department then

9   was the substance of this discussion trying to figure

10   out ways to prevent these unauthorized battery packs

11   from being used in HP laptop computers?

12   A.   That was not the specifically context of

13   the discussions, no.

14   Q.   Well, what was the specific context, if

15   not that?

16   A.   General quality issues.

17   Q.   Well, what -- what general quality issues

18   were related to these unauthorized battery packs that

19   lacked these safety devices?

20   A.   The discussions were a mixture of general

21   quality issues, and one of those general quality issues

22   was the -- the presence of unauthorized batteries.

23   Q.   Well, did you discuss the hazards

24   associated with the fact that these unauthorized

25   battery packs were being used and they lacked certain

Page 35

1   safety devices?

2   A.   Yes.

3   Q.   And what discussions do you remember

4   having about that topic?

5   A.   General discussions on what at a system

6   level could be done to identify those unauthorized

7   batteries.

8   Q.   And that would involve what are called

9   authentication systems, right?

10   A.   I believe so, yes.

11   Q.   And what authentication systems did HP

12   discuss 10 years ago with regard to the ability for the

13   computer to be programmed so it would recognize

14   unauthorized batteries?

15   MR. LEVITES: Objection.

16   You can answer, David.

17   A.   I'm not aware of the detail of what was

18   done.

19   Q.   Did you have discussions within the

20   quality group about the various different types of

21   authentication systems that were available at that

22   time?

23   A.   No, I was not part of any of those

24   discussions.

25   Q.   Who at HP in the qualify department was

Page 36

1   leading the discussions on the potential for installing

2   authentication systems in the HP laptop series?

3   A.   I'm not --

4   MR. LEVITES: Objection. He

5   just testified he was not part of

6   that discussion.

7   Q.   Well, the discussions you had was what

8   could be done to prevent the use of these unauthorized

9   battery packs, correct?

10   A.   That was the general discussion.

11   Q.   And the discussion then was installing or

12   programming laptop computers so that they would

13   potentially recognize unauthorized battery packs,

14   correct?

15   A.   I believe that is the case.

16   Q.   All right. So were those discussions

17   about the various systems available at that time that

18   could be used to do that function?

19   A.   No, general decisions on high level

20   what -- what general things could be done.

21   Q.   Okay. And tell me at a high level what

22   the discussion was about the general things that could

23   be done?

24   A.   Things such as could we mechanically

25   lockout a battery, you know, a high level discussion of

Page 37

1   ideas. And you're correct, I believe that they did

2   conclude some -- some type of software authentication

3   was the -- was the correct methodology, but I was not

4   part of those specific discussions.

5   Q.   Are you aware of who was involved in

6   specific discussions about installing or programming a

7   batter authentication system into the HP laptop series?

8   A.   I am not.

9   Q.   Now, you mentioned that another option

10   that was discussed was locking out. And is that, in

11   other words, internalizing the battery so that the user

12   could not easily replace a battery?

13   A.   So that would be more difficult for a

14   counterfeiter to mechanically replicate the HP battery.

15   Q.   Okay. So was the idea that it would more

16   difficult for a counterfeiter to get to the battery so

17   they can reverse engineer it, or was it -- or did it

18   also include it being more difficult for a user, a

19   purchaser of a laptop, to actually replace their own

20   battery without going to someone professionally to do

21   that job?

22   A.   It was to make it more difficult for an

23   unauthorized battery manufacturer to replicate the HP

24   design.

25   Q.   And what were the -- the ideas on how to

Page 38

1 do that, in other words, how would you make it more

2 difficult to replicate the HP or the HP authorized

3 batteries?

4   A.   One thing that was discussed was an HP

5 emblem embossed on it mechanically.

6   Q.   So, in other words, this would be a

7 method of identifying the HP authorized batteries that

8 could not easily be replicated by the counterfeiter?

9   A.   Correct.

10   Q.   So it would not involve making it more

11 difficult to replicate the function of the battery, it

12 would be the branding on the battery pack itself?

13   A.   Yes.

14   Q.   Were there any -- any other ideas that

15 you recall being discussed of ways to either discourage

16 counterfeiting or discourage the use of unauthorized

17 battery packs by purchasers of HP laptops?

18   A.   Yeah, I don't recall.

19   Q.   You mentioned that there was a discussion

20 of authentication systems, correct?

21   A.   Yes, I -- I've heard the term.

22   Q.   But that was part of the discussion

23 that -- that you recall having with the quality people?

24   A.   Yes.

25   Q.   All right. And those discussions

Page 39

```
 1    occurred at some point before you had these

 2    conversations with Mr. Atkinson?

 3         A.    Yes.

 4         Q.    And do you recall having any discussions

 5    with Mr. Atkinson yourself about what was going on in

 6    the quality department concerning these unauthorized

 7    batteries before he contacted you about what he

 8    discovered in litigation?

 9         A.    No.

10         Q.    How long have you known Mr. Atkinson?

11         A.    Probably around 10 years or so.

12         Q.    When Mr. Atkinson contacted you to

13    discuss this, his discoveries of these unauthorized

14    battery packs that lacked certain safety devices, had

15    already been familiar with Mr. Atkinson before that

16    contact?

17         A.    Yes.

18         Q.    And is Mr. Atkinson correct that you were

19    also familiar with the fact that these unauthorized

20    battery packs that were being used in HP laptop

21    computers lacked certain safety devices?

22         A.    Yes.

23         Q.    And was that something that was discussed

24    by the HP quality team that you mentioned at the

25    meeting?
```

Page 40

1   A.   It was.

2   Q.   And this -- this was something that HP

3   then was aware of you're saying approximately 10 years

4   ago?

5   MR. LEVITES: Objection.

6   You can answer, David.

7   A.   Yes, that the general problem, yes.

8   Q.   Well, the general problem that we are

9   talking about that HP was aware of 10 years ago was

10   that there were unauthorized battery packs that were

11   functional in a HP laptop computer that lacked safety

12   devices that HP required of its authorized battery

13   packs, correct?

14   MR. LEVITES: Objection.

15   You can answer, David.

16   A.   Correct.

17   Q.   And do you have any knowledge as to -- or

18   withdraw that question.

19   During those discussions 10 years ago

20   about these battery packs that lacked safety devices

21   that were functional, was there discussion as to how HP

22   had learned that information?

23   MR. LEVITES: Objection.

24   You can answer, David.

25   A.   I'm not aware.

Page 41

1   Q.   Who was present at the meeting that

2 you're describing where 10 years ago these unauthorized

3 battery packs that lacked safety devices was discussed

4 by the quality team?

5   MR. LEVITES: Objection.

6   You can answer, David.

7   A.   Yeah. It's older quality core teams that

8 are -- that I don't recall any of the specific members.

9   Q.   Who was your supervisor at the time that

10 you had that meeting?

11   A.   It would have been probably have been

12 Carol Scalf.

13   Q.   Harold --

14   A.   Carol Scalf.

15   Q.   Can you spell that?

16   A.   S-C-A-L-F.

17   Q.   And was Ms. Scalf at the meeting?

18   A.   No.

19   Q.   Were you leading that meeting when this

20 discussion occurred 10 years ago?

21   A.   I was not.

22   Q.   How many people were at the meeting?

23   A.   Maybe five people.

24   Q.   And you can't recall any of those five

25 people?

Page 42

1   A.   I -- I honestly would have to go back and

2   try to look through older meeting notices. I don't

3   recall.

4   Q.   Was the -- the meeting that you're

5   referring to 10 years ago to discuss these unauthorized

6   battery packs lacking safety features, was that one of

7   the topics of that meeting or was that the only topic

8   of that meeting?

9   A.   One of many --

10   MR. LEVITES: Objection.

11   You can answer, David.

12   A.   One of many topics.

13   Q.   Okay. And do you recall whether there

14   was just one meeting about that topic or more than one

15   meeting?

16   A.   I believe I've only heard that come in

17   the one meeting.

18   Q.   And do you recall any subsequent meetings

19   after that where any solutions to that problem were

20   discussed by the quality team?

21   A.   I do not.

22   Q.   Now, after you had the discussion with --

23   withdraw that question.

24   The meeting that you're talking about 10

25   years ago or so of the quality team where that was

Page 43

1   discussed, that occurred before Mr. Atkinson called you

2   to discuss what his findings were in the litigation

3   process, correct?

4   MR. LEVITES: Objection.

5   You can answer, David.

6   A.   Yes.

7   Q.   And do you recall approximately how much

8   time passed between when you recall this quality team

9   discussion and you then were contacted by Mr. Atkinson

10   on the same topic?

11   A.   Yeah, maybe around five years.

12   Q.   Five years later?

13   A.   (Indicating).

14   Q.   Okay. And in -- yes?

15   A.   Yes.

16   Q.   That's what I said, you can't nod. The

17   court reporter needs your verbal answer.

18   So in the five years between when you

19   recall the quality team discussion and Mr. Atkinson

20   called you, do you have any recollection of having any

21   other discussions or doing any other work or reading

22   any memos that discussed this unauthorized battery

23   problem and ways to try to solve it?

24   MR. LEVITES: Objection.

25   You can you answer, David.

Page 44

1   A.   No.

2   Q.   And then so you had the meeting with the

3   quality group to discuss that topic and then about five

4   years later Mr. Atkinson called you to discuss the same

5   topic?

6   A.   Yes.

7   Q.   Was Mr. Atkinson present at the meeting

8   10 years ago?

9   A.   I don't believe so.

10   Q.   Did Mr. Atkinson tell you why he was

11   calling you about that topic versus someone else in the

12   company?

13   A.   No.

14   Q.   And what is your recollection of the

15   discussions you had with Mr. Atkinson on this topic

16   when he called you approximately five years after the

17   meeting that you discussed with the quality team?

18   A.   Just generally how it was becoming more,

19   I guess, prevalent of the use of third-party batteries

20   not necessarily counterfeit and what could possibly be

21   done at a system level to identify the use of non-HP

22   batteries.

23   Q.   Now, did Mr. Atkinson reveal to you what

24   he had found in his investigations with regard to these

25   unauthorized battery packs?

Page 45

1   A.   What specifically are you asking?

2   Q.   In other words, did he tell you that what

3   he testified to that I read to you, that some of these

4   unauthorized battery packs were sacrificing all of the

5   safety devices and they did not include those safety

6   devices?

7   A.   He -- he mentioned general lack of safety

8   features, but we didn't talk in detail about any

9   specific features.

10   Q.   Well, did you understand what the safety

11   features he was referring to were designed to protect

12   against?

13   A.   I am generally aware, yes.

14   Q.   And that would include fires, right?

15   A.   Yes.

16   Q.   So after Mr. Atkinson -- now -- withdraw

17   that question.

18   At the time that you recall the initial

19   discussion, the 10-year-ago quality team discussion,

20   was HP at that time aware that these unauthorized

21   battery packs lacked the safety devices that were

22   intended to prevent fires?

23   MR. LEVITES: Objection. He

24   is not here to speak for HP, Steve.

25   MR. SCHWARZ: That -- that is

Page 46

1   not a proper objection.

2   Q.   I'm asking him at the discussion of the

3   quality team were -- was the quality team aware and was

4   it discussed that some of these unauthorized battery

5   packs lacked safety features to prevent fires?

6   A.   It was a general discussion and I'm not

7   aware of who was or was not aware of additional detail.

8   Q.   No. I want to know your recollection of

9   the discussion. In the discussion 10 years ago in the

10   quality team, was information provided that some of

11   these battery packs lacked safety features that would

12   prevent fires?

13   A.   Yes.

14   Q.   And in spite of those discussions you're

15   saying that you have no recollection of anything

16   happened after that to try to come up with some way of

17   preventing these unauthorized battery packs lacking

18   safety features from operating in the laptop computers?

19   A.   I'm generally aware that there was a

20   methodology that was implemented to highlight if

21   an unauthorized battery or a counterfeited battery was

22   being used in the system and would display a warning

23   message.

24   Q.   Okay. So that would be the pop-up as

25   that referred to?

Page 47

1   A.   Yes.

2   Q.   And when did that happen to your

3   knowledge, in other words, when did HP implement that

4   system where a laptop would be -- would display a

5   pop-up message if an unauthorized battery was used?

6   A.   Yeah, I don't know exactly when it was

7   put in.

8   Q.   Mr. Atkinson said that that occurred in

9   2019. Is that something that you are familiar with or

10   do you have a different recollection?

11   A.   That sounds about right.

12   Q.   And what is your knowledge of -- of

13   exactly what happens when a purchaser of an HP laptop

14   installs an unauthorized battery in a laptop after that

15   pop-up message was installed? What happens?

16   A.   They would receive a message stating that

17   it's an unauthorized battery, is my belief. I don't

18   have specific -- I've not studied that in the detail.

19   Q.   Does the laptop continue to function

20   even -- even after that pop-up message is reported to

21   the user?

22   A.   I believe so, yes.

23   Q.   So all it does is advise the person that

24   it's an unauthorized battery. It doesn't shut the

25   computer down?

1   A.   That's my understanding.

2   Q.   And does -- do you know what the warning

3   is that is provided other than it's unauthorized

4   battery?

5   A.   I don't know. I would have to research

6   that.

7   Q.   Okay. Do you know if the -- if the

8   pop-up message indicates that using an unauthorized

9   battery without safety devises could result in a

10   catastrophic fire?

11   A.   I'm sorry, could you repeat that?

12   Q.   Sure. I misspoke and I apologize.

13   Do you know if the pop-up message warns

14   users of unauthorized battery that continued use of

15   such a battery could result in a catastrophic fire?

16   MR. LEVITES: Objection.

17   You can answer, David.

18   A.   I'm not -- I don't believe it goes into

19   that level of detail.

20   Q.   Are you aware of the -- the technology

21   that is utilized in this new system with the pop-up

22   message to recognize an unauthorized battery?

23   A.   I am not familiar with any detail.

24   Q.   Are you familiar with the concept that

25   the motherboard can query the battery pack and seek

Page 49

1   certain information from the battery pack that if it

2   doesn't match what the motherboard is expecting that it

3   would display this message?

4   A.   Yes.

5   Q.   Is that the general method that you

6   understand that HP implemented in 2019?

7   A.   Yes.

8   Q.   Are you aware of how long prior to 2019

9   the technology to recognize that type of -- of the

10   query and response method was in existence prior to

11   2019 -- let me withdraw that question.

12   Are you familiar with how long that

13   technology that HP implemented in 2019 was available

14   prior to 2019?

15   MR. LEVITES: Objection.

16   You can answer, David.

17   A.   I am not.

18   Q.   So, in other words, at the time that you

19   had the discussion 10 years ago, which was before 2019,

20   right? Ten years ago would be 2014, approximately; is

21   that correct?

22   A.   Correct.

23   Q.   So the quality assurance discussion that

24   we had that you've mentioned previously in 2014, was

25   there any discussion of similar technology being

Page 50

1   available at that time?

2   MR. LEVITES: Objection.

3   You can answer, David.

4   A.   Yeah, I'm not aware of any -- any further

5   follow-on discussion based on the initial one.

6   Q.   Now, the -- the pop-up message and the

7   query-and-response technology that was implemented in

8   2019 as Mr. Atkinson said, that was implemented on

9   newly-manufactured laptops, correct?

10   A.   That's correct.

11   Q.   Was there any effort to make that

12   technology available on previously-sold HP laptops?

13   A.   I don't recall the detail, but I believe

14   it's not technically feasible.

15   Q.   So it's not technically feasible to

16   update a prior laptop with software that would perform

17   that function?

18   MR. LEVITES: Objection.

19   You can answer, David.

20   A.   I only know that my -- it would have

21   needed to update the battery software and that's not

22   something that's possible.

23   Q.   The battery software, are you referring

24   to the software in the battery pack or the software

25   within the laptop itself that relates to the battery?

Page 51

1   A.   Right, the battery software.

2   Q.   The software in the battery pack?

3   A.   Correct.

4   Q.   So, in other words, this -- there has to

5   be something programmed into the battery pack to send

6   the right message back to the motherboard?

7   A.   I believe that is the case.

8   Q.   Was there any of discussion within the

9   quality group either 10 years ago or after Mr. Atkinson

10   called you again approximately five or six years ago

11   about this problem regarding notifying prior HP laptop

12   users about the dangers of using unauthorized

13   batteries?

14   MR. LEVITES: Objection.

15   You can answer, David.

16   A.   I am not aware of any discussion.

17   Q.   In the HP quality group, are you familiar

18   with discussions of recalls of HP products?

19   A.   I -- I'm -- I've heard of some recalls,

20   yes.

21   Q.   And methodology used for recalls is to

22   notify people who have registered their warranties of

23   the existence of a recall?

24   A.   I believe that is the case. I'm not

25   involved in recall activities.

Page 52

1   Q.   Which -- which unit or department of HP

2   is involved in notifying previous purchasers of

3   recalls, to your knowledge?

4   A.   I'm not sure.

5   Q.   When Mr. Atkinson called you -- he

6   indicated he talked to you on more than one occasion

7   about this topic five or six years ago.

8   Do you have any recollection of how many

9   phone calls you had with him?

10   A.   On this topic I only recall one, one

11   discussion.

12   Q.   And after your discussion with

13   Mr. Atkinson about this topic, which again was four or

14   five years after the meeting you've discussed where

15   this topic was discussed, did you bring the information

16   that Mr. Atkinson provided you to anyone else's

17   attention?

18   A.   I did not.

19   Q.   So you didn't talk to your quality group

20   that had previously discussed this topic about what

21   Mr. Atkinson told you he had discovered in looking at

22   some of these unauthorized battery packs for litigation

23   purposes?

24   A.   No.

25   Q.   Why did you not share that with anyone

Page 53

1   within your group?

2   A.   My belief was that he would -- would take

3   that information where it needs to go.

4   Q.   That Lee would that, Mr. Atkinson?

5   A.   Correct.

6   Q.   So you didn't think that Mr. Atkinson was

7   providing only you with this information. It was your

8   understanding he had provided it to other people within

9   HP and that they would take some action with regard to

10   what his findings were?

11   A.   Yes, I would believe he would.

12   Q.   You didn't think that it was your

13   responsibility at that point because you understood

14   that he was sharing that information with other people

15   who had more appropriate job descriptions to deal with

16   this problem?

17   A.   That's right.

18   MR. LEVITES: Objection.

19   You can answer, David.

20   Q.   And did -- did Mr. Atkinson indicate to

21   you who else he shared this information with?

22   A.   He did not.

23   MR. SCHWARZ: All right.

24   We've been going about an hour. Why

25   don't we take a break and I will

Page 54

```
1              take a look at my notes and see what

2              else I want to ask you, okay?  We'll

3              take about five minutes.

4                   THE WITNESS:  Okay.

5                   MR. LEVITES:  See you all in

6              five minutes.

7                   THE VIDEOGRAPHER:  We are now

8              going off the record at 2:08 p.m.

9              (Brief recess.)

10                  THE VIDEOGRAPHER:  We are now

11             going back on the record at 2:16

12             p.m.

13        Q.   Mr. Pipho, I'm going to share my screen

14   again and show you what I've marked as Exhibit 9.

15             (Whereupon, Plaintiff's Exhibit 9, 6-Cell

16             Battery Specification for MU06062, Revision

17             1.3, Bates stamped HP01378 through HP01389,

18             was marked for identification.)

19        Q.   Can you see that?  Mr. Pipho, can you see

20   that?

21        A.   Yes, I can see that.

22        Q.   Okay.  I'll represent to you that Exhibit

23   9 is a document that was produced in this litigation by

24   your employer HP, and this is entitled 6-Cell Battery

25   Specification for MU06062, Revision 1.3.  And I'll
```

Page 55

1   represent to you that this is a specification for the

2   battery pack for the computer, the laptop computer

3   that's the subject of this litigation.

4   Are you familiar with these types of

5   specifications that HP has for its battery packs?

6   A.   I am familiar with the existence of these

7   specifications.

8   Q.   And are you -- have you ever seen this

9   particular specification before?

10   A.   I have not.

11   Q.   Okay. I just want to turn to the second

12   page of this, which has been marked HP01379. And

13   there's a battery connector pinout section, section

14   3.2.

15   Do you see that?

16   A.   Yes.

17   Q.   Is that something you're familiar with in

18   your work at HP, something called a battery connector

19   pinout?

20   A.   Yes.

21   Q.   And this would be the designation of the

22   pins on the battery packs that connect into the

23   motherboard?

24   A.   That's correct.

25   Q.   Now, this one has a Pin No. 6 that the

Page 56

1   symbol is B/I. And it says connect to thermistor.

2   Do you see that?

3   A.   I do.

4   Q.   And are you familiar with what that

5   refers to?

6   MR. LEVITES: Objection.

7   You can answer, David.

8   A.   It refers to a device within the battery,

9   I believe, that represents the temperature.

10   Q.   And I'm going to show you now the other

11   document that we've marked as Exhibit 10.

12   (Whereupon, Plaintiff's Exhibit 10,

13   Defendant's HP Inc.'s Answer to Plaintiffs;

14   Third set of Interrogatories, was marked for

15   identification.)

16   Q.   And this is HP's Answers to Plaintiffs'

17   Third Set of Interrogatories.

18   And question one reads, Describe in

19   detail the designed function of Pin No. 6 on the

20   approved battery pack described in Deposition Exhibit 4

21   at HP -- at page HP 01311, and specifically, what the

22   motherboard is programmed to do if the thermistor in

23   the battery pack connected through Pin No. 6 registers

24   a temperature over 45 degrees Celsius.

25   And the answer provided by HP was, first

Page 57

1   an objection, and then it says notwithstanding the

2   subject to and without waiving the foregoing, a

3   thermistor attached to the battery cells senses

4   temperature. This thermistor is connected through

5   battery connector Pin No. 6 to the embedded controller

6   on the motherboard. At some temperature above 45

7   degrees Celsius, the embedded controller will inhibit

8   charging to the battery.

9   Do you see that?

10   A.   I do.

11   Q.   And are you familiar with -- with the --

12   what is described in that answer?

13   MR. LEVITES: Objection.

14   You can answer, David.

15   A.   I am. Yeah, I'm familiar with what that

16   can do, yes.

17   Q.   In other words, in your quality assurance

18   work, have you encountered -- you said that you did

19   some quality assurance work with regard to batteries

20   concerning the interaction between the motherboard and

21   the battery pack, correct?

22   A.   Yes.

23   MR. LEVITES: Objection.

24   You can answer.

25   Q.   And that would -- that would be one way

Page 58

1   to describe what's in this answer, correct, an

2   interaction between the battery pack and the

3   motherboard?

4   A.   Yes.

5   Q.   And so it seems to indicate that the

6   thermistor that's in the battery pack would report

7   directly to the motherboard.

8   Is that how you interrupt this?

9   A.   Yes.

10   Q.   And it wouldn't report through the to

11   fuel gauge. This would be a separate process where the

12   thermistor reports directly to the motherboard?

13   A.   In this --

14   MR. LEVITES: Objection.

15   You can answer.

16   A.   Yes, in this specification that appears

17   to be the case.

18   Q.   And are you familiar with -- with the

19   technology used to accomplish that interaction?

20   A.   Generally.

21   Q.   So it says that when the thermistor

22   reports temperatures above 45 degrees Celsius, that

23   something called a embedded controller will inhibit

24   charging to the battery.

25   Do you understand what that means?

Page 59

1   A.   Yes.

2   Q.   And can you describe? In other words,

3   does that mean that if -- if a temperature exceeds

4   45 degrees Celsius that something on the motherboard

5   will disconnect the power to the battery pack?

6   A.   I believe that is the case, yes.

7   Q.   Do you know how that is accomplished?

8   A.   I -- not precisely, no. In general, the

9   embedded controller that communicates with the battery

10   will also communicate with a -- a separate device

11   called a charger, and it would communicate to that

12   charger to stop the charge.

13   Q.   And once the charge is stopped, then

14   the -- whatever the condition was that was causing the

15   excessive heat would also stop?

16   A.   Yes, that should be the case.

17   Q.   Now, if a battery pack, an unauthorized

18   battery pack lacked a thermistor that reported to the

19   motherboard through Pin No. 6, is that something that

20   the laptop, the motherboard would be able to sense or

21   understand?

22   MR. LEVITES: Objection.

23   Are we still talking about

24   this -- this and No. 6, this

25   diagram, this spec?

Page 60

1   MR. SCHWARZ: Yep.

2   Q.   Do you understand the question? I can

3   rephrase it because it probably wasn't very well

4   worded. Let me rephrase it.

5   Do you have any knowledge of whether the

6   motherboard is capable of detecting that it's not

7   getting any information through the thermistor through

8   Pin No. 6?

9   MR. LEVITES: Objection.

10   You can answer, David.

11   A.   Are you asking this question generally on

12   any motherboard or for this specific system?

13   Q.   Just generally, the technology of a

14   motherboard in general. Is a motherboard capable of

15   detecting that it's not receiving a signal from a

16   component that it's expected to receive a signal from?

17   A.   Yes.

18   Q.   So if a -- if a -- an unauthorized

19   battery packs lacked a thermistor as a safety device

20   that was supposed to report to the motherboard, the

21   motherboard could potentially detect that and take some

22   action, such as either a pop-up message or not allowing

23   the battery pack to function, correct?

24   MR. LEVITES: Objection.

25   You can answer.

Page 61

1   A.   It is possible, correct.

2   Q.   So that -- that technology could exist,

3   something that could be built into the motherboard to

4   have that reaction when it was plugged into a -- when a

5   battery pack lacked that safety feature, correct?

6   MR. LEVITES: Objection.

7   You can answer, David.

8   A.   Yes, it is technically possible.

9   Q.   And during your quality meeting ten years

10   ago when the problem of unauthorized battery packs

11   lacking certain safety features was discussed, was that

12   particular solution ever discussed of programming the

13   laptop to shut down when it didn't detect a thermistor

14   sending signals to it?

15   A.   No, not that I'm aware.

16   MR. LEVITES: Objection.

17   You can answer.

18   Q.   At any point in your career, Mr. Pipho,

19   either -- or any time after the meeting 10 years ago to

20   discuss these unauthorized battery packs problems, did

21   you have any involvement in battery authentication

22   systems that were either contemplated or installed in

23   HP laptops?

24   A.   Can you --

25   MR. LEVITES: Objection.

Page 62

1   You can answer.

2   A.   Sorry, can you repeat the question?

3   Q.   Sure. At any time -- well, let me

4   withdraw that question.

5   At any time in your career at HP, have

6   you been involved in any way in determining or

7   evaluating battery authentication systems that could be

8   involved in laptops?

9   A.   I've been involved in some discussion,

10   yes.

11   Q.   And tell me about those discussions with

12   regard to battery authentication systems?

13   A.   I recall discussion around different

14   techniques that could have been used in different

15   encryption methodologies. But, honestly, that's not my

16   responsibility and I am not -- I don't have any -- any

17   follow-up on any of that.

18   Q.   What was the context that that was

19   brought up in?

20   A.   Part of that was -- was the discussion

21   with Lee.

22   Q.   So in the discussion with Mr. Atkinson

23   when he called you five or six years ago to talk about

24   these unauthorized battery packs that lacked safety

25   features, you had a discussion about battery

Page 63

1   authentication systems with him?

2   A.   Right.

3   Q.   What do you remember about that topic?

4   A.   Just that there were different difficult

5   levels of authentication methods. And we had some high

6   level discussion on what -- what would be feasible to

7   implement. But I was not involved in any follow-on

8   discussions with him on that topic.

9   Q.   Okay. So you talked to him about

10   technology that existed at least at that time that

11   would allow some identification of an unauthorized

12   battery by the motherboard?

13   A.   Yes.

14   Q.   And one of those authentication systems

15   was the system where the motherboard would send a

16   signal and except some return information to come from

17   the battery pack?

18   A.   I believe that is the case, yes.

19   Q.   And if that information that came from

20   the battery pack didn't match up with what the

21   motherboard expected, then something could be done in

22   the motherboard to either disable the computer or send

23   a pop-up message to the user?

24   A.   Yes.

25   MR. LEVITES: Steve, before

Page 64

1   you ask your next question, can we

2   go off for a sec?

3   MR. SCHWARZ: Sure.

4   MR. LEVITES: Okay.

5   THE VIDEOGRAPHER: We are

6   going off the record at 2:29 p.m.

7   (Off the record.)

8   THE VIDEOGRAPHER: We are

9   going back on the record at 2:30

10   p.m.

11   Q.   When we took a short break there,

12   Mr. Pipho, we were talking about one authentication

13   system of the motherboard sending a query to the

14   battery pack and the battery pack responding with some

15   information that would either match up or not match up

16   with what the motherboard expected.

17   Do you recall that?

18   A.   Yes.

19   Q.   So that was one of the authentication

20   systems or authentication technology that you talked

21   about with Mr. Atkinson?

22   A.   Correct.

23   Q.   What other types of authentication

24   systems do you recall talking about with Mr. Atkinson

25   about during either the one or multiple phone calls you

Page 65

```
 1    had with him about unauthorized battery packs lacking

 2    safety features?

 3            A.      Those are the only ones I recall.

 4            Q.      That's the only authentication system you

 5    recall?

 6            A.      Yes.

 7            Q.      And you are saying that you have no

 8    recollection of any further discussions about

 9    implementing authentication systems after that call

10    with Mr. Atkinson?

11            A.      No.

12            Q.      Did you have some understanding that

13    Mr. Atkinson was pursuing that topic with someone else

14    at HP at that time?

15            A.      I believe he would be, yes.

16            Q.      Do -- do you believe that -- that he

17    would be or do you believe that he was?

18            A.      I believe that he would be.

19            Q.      All right.  So --

20            A.      -- I'm not sure that he was.

21            Q.      Okay.  So you assumed that he was talking

22    to someone else, but you don't know that he was talking

23    to someone else.

24            A.      Correct.

25            Q.      And even though he talked to you about it
```

Page 66

1   and he sought you out, you didn't feel that it was your

2   responsibility to share that information with anyone

3   else?

4   MR. LEVITES: Objection. You

5   can answer.

6   MR. SCHWARZ: You have to

7   answer again because I think his

8   objection went over your...

9   A.   That's correct.

10   Q.   Okay. Thank you.

11   MR. SCHWARZ: I believe those

12   are all the questions I have,

13   Mr. Pipho. Thank you.

14   MR. LEVITES: Maybe we can

15   have five minutes.

16   Maria, are you ready now?

17   MS. MASTRIANO: I don't have

18   any addition questions.

19   MR. LEVITES: Okay. Let me

20   just go over my notes. I think

21   we're probably done, but if we can

22   get back on in five minutes.

23   MS. MASTRIANO: Sure.

24   MR. LEVITES: Thanks. See

25   everyone in five.

Page 67

```
 1                      THE VIDEOGRAPHER:  We are now

 2             going off the record at 2:33 p.m.

 3             (Brief recess.)

 4                      THE VIDEOGRAPHER:  We are now

 5             going back on the record at 2:40

 6             p.m.

 7                      MR. LEVITES:  Hi, David.  I

 8             have no further questions for you

 9             either, so this concludes your

10             deposition today.  Thank you for

11             your time and consideration.

12                      Thank you to counsel and the

13             reporter and videographer, and I

14             believe that's all for today.

15                      MR. SCHWARZ:  Agreed.  Thank

16             you.

17                      THE VIDEOGRAPHER:  We are now

18             going off the record at 2:40 p.m.,

19             and this concludes the testimony

20             given by David Pipho.

21                      Total number of media used

22             will be two and will be retained by

23             Veritext Priority One.

24             (Whereupon, the deposition concluded at

25             2:42 p.m.)
```

Page 68

```
 1   C E R T I F I C A T I O N
 2    STATE OF NEW YORK            )
                                   : ss:
 3    COUNTY OF NEW YORK           )
 4
 5                 I, ToniAnn Acquaro, a notary public for
 6   and within the State of New York, do hereby certify:
 7                 That the witness whose examination is
 8   hereinbefore set forth was duly sworn and that such
 9   examination is a true record of my shorthand notes.
10                 I further certify that I am not related
11   to any of the parties to this action by blood or by
12   marriage and that I am in no way interested in the
13   outcome of this matter.
14                 IN WITNESS WHEREOF, I have hereunto set
15   my hand this 7th day of August, 2024.
16
17
18
19
20   _____
21   ToniAnn Acquaro,
     Professional Court Reporter
22   and New York State Notary, 01AC6200255
     My Commission Expires January 26, 2025
23
     (The foregoing certification of this transcript does not
24   apply to any reproduction of the same by any means,
     unless under the direct control and/or supervision of
25   the certifying reporter.)
```
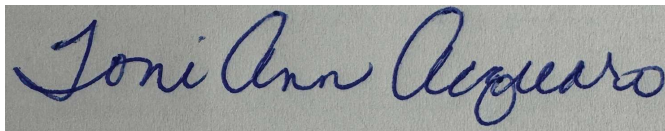
[00704 - afternoon]   Page 1

0
00704   1:4 6:23
01311   56:21
01ac6200255   68:22

1
1   2:4 24:7
1.3   3:8 54:17
1.3.   54:25
10   3:10 33:10 33:12 35:12 39:11 40:3,9 40:19 41:2,20 42:5,24 44:8 45:19 46:9 49:19 51:9 56:11,12 61:19
10019   2:11
101   27:16
10888   68:19
11   3:12 21:23 22:1 23:16
126   2:16
13   23:17
13202   2:17
1330   2:10
144111   8:6
14618   2:5
1882   2:4
1:05   1:19 6:3
1:21   1:4 6:23

2
2   3:12 21:24

2000   12:4,6,8 12:24 13:23
2014   49:20,24
2019   47:9 49:6 49:8,11,13,14 49:19 50:8
2023   3:12 21:24
2024   1:18 6:4 68:15
2025   68:22
21   3:7
215   2:16
23a   2:10
24   14:3
26   68:22
2:08   54:8
2:29   64:6
2:33   67:2
2:42   67:25

3
3.2.   55:14
3113   4:17

4
4   56:20
45   56:24 57:6 58:22 59:4
46   18:18

5
54   3:10
56   3:12

6
6   3:7 54:15,24 55:25 56:19,23 57:5 59:19,24 60:8

7
7   1:18 6:4 22:10
77355   8:7
7th   68:15

8
8   3:3

9
9   3:7 54:14,15 54:23
94   12:4,6
98   22:3,10 23:17
99   24:7

a
ability   35:12
able   25:19 31:3 59:20
above   1:15 19:1 57:6 58:22
accessories   12:17 13:24
accomplish   58:19
accomplished   59:7

acquaro   1:16 7:5 68:5,21
acquired   13:19 14:1
action   7:10 24:8 28:8,12 53:9 60:22 68:11
activities   51:25
activity   25:4
actual   25:4
actually   9:7 13:16 24:21,22 25:4 37:19
addition   29:1 66:18
additional   46:7
address   30:2
adheres   22:22
administer   1:4 1:6 4:13 7:8,8
administering   4:21
advanced   11:11
advise   47:23
affidavit   10:20 26:20
affiliations   7:17
aftermarket   28:18
afternoon   1:19 6:2 8:12

[ago - aware]

ago 33:10,13 35:12 40:4,9 40:19 41:2,20 42:5,25 44:8 45:19 46:9 49:19,20 51:9 51:10 52:7 61:10,19 62:23
agree 6:14
agreed 4:3,7,11 4:15 5:5 67:15
allow 63:11
allowing 60:22
americas 2:10
analyses 15:19
analysis 13:2,3 13:6 14:11 15:23 16:22 17:25 18:1 19:18 29:6
analyze 25:4
analyzed 19:17
announced 8:14
answer 3:10 9:23 15:1,15 16:15,25 17:18 18:22 22:15 23:25 25:2,14 25:18,25 26:5 26:9,12,15 27:19 28:1,6 28:11,17,21,24 29:3,8,15,21,24 30:4,10,13,20

30:24 31:4,7 31:12,20 33:5 33:18 35:16 40:6,15,24 41:6 42:11 43:5,17,25 48:17 49:16 50:3,19 51:15 53:19 56:7,13 56:25 57:12,14 57:24 58:1,15 60:10,25 61:7 61:17 62:1 66:5,7
answered 24:15 34:6
answers 9:13 18:16 56:16
anymore 28:12
apologies 27:15
apologize 48:12
appearance 7:14
appearances 7:17
appearing 2:1
appears 58:16
applied 11:8
apply 68:24
appropriate 53:15
approved 56:20
approximately 11:18 33:12

40:3 43:7 44:16 49:20 51:10
area 11:12
asked 26:17
asking 8:14 17:11 45:1 46:2 60:11
aspect 19:7,17
assembling 11:15
associate's 11:7
associated 25:11 34:24
assumed 65:21
assurance 49:23 57:17,19
atkinson 3:12 10:10,23 21:25 22:2,10 24:15 26:18,22 32:2 32:13 39:2,5 39:10,12,15,18 43:1,9,19 44:4 44:7,10,15,23 45:16 47:8 50:8 51:9 52:5 52:13,16,21 53:4,6,20 62:22 64:21,24 65:10,13
atkinson's 10:12,19 18:15
attached 57:3

attention 52:17
attorney 5:6 7:19 8:13
audio 6:12
august 1:18 3:12 6:4 21:23 68:15
authentic 30:14
authentication 35:9,11,21 36:2 37:2,7 38:20 61:21 62:7,12 63:1,5 63:14 64:12,19 64:20,23 65:4 65:9
authorized 4:13 7:7 20:2 23:5,9 32:16 38:2,7 40:12
available 35:21 36:17 49:13 50:1,12
avenue 2:10
aware 15:2,16 16:17 18:9 19:24,25 23:21 23:25 24:16,20 25:3 28:17,22 29:1,1 31:5,6 32:19 35:17 37:5 40:3,9,25 45:13,20 46:3 46:7,7,19 48:20 49:8

[aware - catastrophic]

50:4 51:16 61:15	18:2,7,17,20 19:4,21,23	60:19,23 61:5 61:10,20,21	**brief** 54:9 67:3 **bring** 52:15
awareness 32:18 33:14	20:1,9,12,13,17 20:18 21:5,12	62:7,12,24,25 63:12,17,20	**brought** 62:19 **built** 23:8 61:3

b

c

b 3:5 56:1
back 14:10
  16:18 17:21,23
  23:16 30:1
  31:13,24 42:1
  51:6 54:11
  64:9 66:22
  67:5
background
  15:10
balance 20:16
  20:22,25
balancing
  30:23
based 10:6,6
  50:5
bates 3:8 54:17
batter 37:7
batteries 12:20
  12:21 14:22
  15:13,17 23:12
  25:20 28:18,19
  34:22 35:7,14
  38:3,7 39:7
  44:19,22 51:13
  57:19
battery 3:7
  11:3 13:7,11
  15:11,20 16:6
  16:9,18,21

18:2,7,17,20
19:4,21,23
20:1,9,12,13,17
20:18 21:5,12
21:15,17 22:13
22:18,25 23:5
23:9,13,19,22
24:2,17,23
25:5,12 29:6
29:12,18 30:9
30:13,14,15,21
30:25 31:1,16
32:14,17 33:1
33:14 34:10,18
34:25 36:9,13
36:25 37:11,12
37:14,16,20,23
38:11,12,17
39:14,20 40:10
40:12,20 41:3
42:6 43:22
44:25 45:4,21
46:4,11,17,21
46:21 47:5,14
47:17,24 48:4
48:9,14,15,22
48:25 49:1
50:21,23,24,25
51:1,2,5 52:22
54:16,24 55:2
55:5,13,18,22
56:8,20,23
57:3,5,8,21
58:2,6,24 59:5
59:9,17,18

60:19,23 61:5
61:10,20,21
62:7,12,24,25
63:12,17,20
64:14,14 65:1
becoming
  44:18
beginning 7:18
behalf 7:23 8:1
  8:5
belief 47:17
  53:2
believe 35:10
  36:15 37:1
  42:16 44:9
  47:22 48:18
  50:13 51:7,24
  53:11 56:9
  59:6 63:18
  65:15,16,17,18
  66:11 67:14
ben 17:5 20:7
benjamin 2:12
  7:25
best 9:15
betke 2:8 8:1
  24:12
blevites 2:12
blood 68:11
bmu 21:17
board 16:1,2
branding 38:12
break 9:20,21
  9:22 53:25
  64:11

brief 54:9 67:3
bring 52:15
brought 62:19
built 23:8 61:3

c 2:1 41:16 68:1
  68:1
c.p.l.r. 4:16
call 65:9
called 14:23
  18:10 35:8
  43:1,20 44:4
  44:16 51:10
  52:5 55:18
  58:23 59:11
  62:23
calling 44:11
calls 52:9 64:25
camera 6:8
  11:15
capable 60:6,14
capacity 18:19
  19:3
career 14:20
  61:18 62:5
carol 1:3 6:19
  41:12,14
case 6:23 8:22
  9:5,5,8,9 10:20
  22:1,3 29:11
  36:15 51:7,24
  58:17 59:6,16
  63:18
catastrophic
  48:10,15

[catch - copy] Page 4

catch 28:20
cause 13:4
causing 59:14
cell 3:7 20:16
   20:21,24 21:2
   30:23 54:15,24
cells 16:21 18:2
   18:8 23:14
   57:3
celsius 18:18
   56:24 57:7
   58:22 59:4
certain 25:12
   29:10 33:2
   34:25 39:14,21
   49:1 61:11
certification
   4:5 68:23
certify 68:6,10
certifying
   68:25
charge 14:14
   59:12,13
charger 59:11
   59:12
charging 13:10
   57:8 58:24
charles 1:5,6
chose 28:15
circuitry 16:5
   21:12
civ 1:3
clarify 22:7
clean 9:17

clear 22:11
come 42:16
   46:16 63:16
commencing
   1:19
commercially
   12:18
commission
   68:22
communicate
   29:4 30:1,6
   59:10,11
communicated
   31:13
communicates
   59:9
compact 11:22
   11:23 12:3,6
   12:12,24 13:14
   13:19 14:1,20
company 24:19
   25:9 44:12
completed 11:9
completely
   31:16
component
   60:16
compound
   17:14
computer
   11:22 12:1
   16:5 19:7,7
   31:22 35:13
   40:11 47:25
   55:2,2 63:22

computers 8:23
   9:1,3 20:5
   32:15 33:2,16
   34:11 36:12
   39:21 46:18
concept 21:4
   25:22 48:24
concerning
   39:6 57:20
concerns 30:2
conclude 37:2
concluded
   67:24
concludes 67:9
   67:19
condition 14:23
   59:14
conditions
   20:10
conducted 4:17
   6:6,25
conference
   4:18,20,24
confirming
   4:23
confusing
   17:14
connect 55:22
   56:1
connected
   16:13 56:23
   57:4
connection 6:9
connections
   16:8

connector
   55:13,18 57:5
consent 5:1
consequences
   21:7
consideration
   67:11
considered 5:2
consistent 34:4
consumers
   23:23
contact 39:16
contacted 39:7
   39:12 43:9
contemplated
   61:22
context 25:17
   28:2 34:12,14
   62:18
continue 6:13
   27:16 47:19
continued
   48:14
control 68:24
controller
   18:11 57:5,7
   58:23 59:9
conversation
   27:18,21 28:3
conversations
   25:16 26:18
   39:2
convey 30:11
copy 5:7

[core - different]   Page 5

core 41:7	**counterfeiting** 38:16	**deceased** 1:5,6	**design** 9:2,10 13:10 15:22 22:22 37:24
corporation 11:22	**county** 68:3	**decisions** 36:19	
correct 10:11 10:15,16 12:13 14:2 16:3,6,7 17:11 20:14,15 23:1,2,6,14 27:11,13 33:6 36:9,14 37:1,3 38:9,20 39:18 40:13,16 43:3 49:21,22 50:9 50:10 51:3 53:5 55:24 57:21 58:1 60:23 61:1,5 64:22 65:24 66:9	**court** 1:1,16 4:14,18,23 6:22 7:4,20 9:14,17 17:17 43:17 68:21	**defendant** 2:9 2:15	**designation** 55:21
	customers 14:17	**defendant's** 3:10 56:13	**designed** 15:11 23:12 45:11 56:19
	cv 1:4 6:23	**defendants** 1:11	
	d	**degrees** 18:18 56:24 57:7 58:22 59:4	**detail** 20:19 35:17 45:8 46:7 47:18 48:19,23 50:13 56:19
	d 3:1 4:1,17 8:6 8:6	**department** 13:14 14:1,7 34:8 35:25 39:6 52:1	
	dallas 11:12		**details** 9:7
	danger 31:15	**depends** 6:8	**detect** 60:21 61:13
	dangers 51:12	**depose** 26:17	**detecting** 60:6 60:15
	date 6:3	**deposition** 1:7 3:12 4:6,12,17 4:22 6:6,17,24 8:17 21:24 22:2 56:20 67:10,24	**determining** 62:6
coughlin 2:8 8:1	**david** 1:8 3:3 6:17 15:1 16:15 17:1 18:22 26:6 27:12 33:5,18 35:16 40:6,15 40:24 41:6 42:11 43:5,25 48:17 49:16 50:3,19 51:15 53:19 56:7 57:14 60:10 61:7 67:7,20		**deviate** 21:3
coughlinbetk... 2:12			**device** 56:8 59:10 60:19
counsel 2:3,9 2:15 4:4,8,16 4:18 5:9 6:18 7:15 67:12		**describe** 15:25 56:18 58:1 59:2	**devices** 15:11 19:21 23:8 31:17 33:3 34:19 35:1 39:14,21 40:12 40:20 41:3 45:5,6,21
		described 31:22 56:20 57:12	
counterfeit 11:3 31:1 44:20		**describing** 31:16 41:2	**devises** 48:9
	day 68:15	**description** 3:6	**devry** 11:6
counterfeited 46:21	**deal** 53:15	**descriptions** 53:15	**diagram** 59:25
counterfeiter 37:14,16 38:8	**death** 9:5		**different** 13:9,9 35:20 47:10

[different - exhibits] Page 6

62:13,14 63:4
difficult 37:13
  37:16,18,22
  38:2,11 63:4
direct 68:24
directly 16:13
  58:7,12
disable 63:22
disconnect 59:5
discourage
  25:19 38:15,16
discovered
  39:8 52:21
discoveries
  39:13
discuss 25:23
  28:15 34:23
  35:12 39:13
  42:5 43:2 44:3
  44:4 61:20
discussed 30:4
  37:10 38:4,15
  39:23 41:3
  42:20 43:1,22
  44:17 46:4
  52:14,15,20
  61:11,12
discussion 25:9
  27:23 28:10
  29:13,22 32:7
  32:12,25 34:9
  36:6,10,11,22
  36:25 38:19,22
  40:21 41:20
  42:22 43:9,19

45:19,19 46:2
46:6,9,9 49:19
49:23,25 50:5
51:8,16 52:11
52:12 62:9,13
62:20,22,25
63:6
discussions
  10:6,8,24 25:2
  25:7,8 28:8,9
  32:2,4,6,21
  33:8,13 34:13
  34:20 35:3,5
  35:19,24 36:1
  36:7,16 37:4,6
  38:25 39:4
  40:19 43:21
  44:15 46:14
  51:18 62:11
  63:8 65:8
display 46:22
  47:4 49:3
district 1:1,1
  6:21,22
document
  54:23 56:11
doing 14:11
  24:10 29:16
  30:2 43:21
drive 8:7
drives 12:19
duly 8:8 68:8

e

e 1:5,6 2:1,1 3:1
  3:5 4:1,1 5:8
  68:1
easily 37:12
  38:8
education 11:4
  11:10 14:21
effect 4:14
effort 31:14
  50:11
efforts 22:12
  23:18
either 20:1
  38:15 51:9
  60:22 61:19,22
  63:22 64:15,25
  67:9
electrical 9:2
  9:10 13:10
  14:8,10
electronic
  11:25
electronics
  11:8
else's 52:16
embedded 57:5
  57:7 58:23
  59:9
emblem 38:5
embossed 38:5
employer 11:14
  54:24
employment
  11:19

encountered
  57:18
encryption
  62:15
engineer 14:8
  14:10 37:17
engineering
  12:10
ensure 14:17
  21:2
enter 14:23
entitled 54:24
esq 2:6,12,18
estate 1:4,6
evaluating 62:7
exactly 28:3
  47:6,13
examination
  3:2 8:10 68:7,9
examined 8:8
exceeds 18:7
  59:3
except 4:9
  26:22 34:5
  63:16
excessive 59:15
excuse 17:17
exhibit 3:7,10
  3:12 5:7,7,10
  21:23 22:1
  23:16 54:14,15
  54:22 56:11,12
  56:20
exhibits 3:13
  5:6

[exist - going]

exist 61:2	**faraci** 2:2 7:23	54:3,6 62:23	**g**
existed 63:10	**faraci.com** 2:6	66:15,22,25	**gained** 29:5,9
existence 49:10	**feasible** 50:14	**focus** 15:22	**gauge** 21:11
51:23 55:6	50:15 63:6	**follow** 23:4	58:11
expect 23:10	**feature** 20:17	50:5 62:17	**gauge's** 21:15
expected 60:16	61:5	63:7	**general** 10:25
63:21 64:16	**features** 15:17	**follows** 8:9	11:1 15:16
expecting 49:2	15:19 22:23	**force** 4:14	20:8 21:16
expertise 9:10	23:11 25:13	**foregoing** 57:2	32:18 34:16,17
expires 68:22	30:16,18 32:16	68:23	34:20,21 35:5
explain 12:15	33:15 42:6	**form** 4:9 17:8	36:10,19,20,22
express 5:1	45:8,9,11 46:5	17:10 33:22,25	40:7,8 45:7
external 12:18	46:11,18 61:11	**forth** 68:8	46:6 49:5 59:8
f	62:25 65:2	**found** 44:24	60:14
	feel 66:1	**four** 26:1,1	**generally** 15:2
f 4:1 41:16 68:1	**field** 13:2	31:6 52:13	18:23 19:24,25
fact 32:14	**figure** 34:9	**fuel** 21:11,14	21:17 25:10
34:24 39:19	**filing** 4:5	58:11	32:19 44:18
factual 8:24	**financially** 7:10	**function** 24:10	45:13 46:19
failure 13:2,3,6	**find** 24:9,19	30:23 31:3	58:20 60:11,13
14:11 15:19,22	**finding** 30:8	36:18 38:11	**gestures** 9:14
16:22 17:25	**findings** 43:2	47:19 50:17	**getting** 22:17
18:1 19:18	53:10	56:19 60:23	60:7
failures 13:7	**fire** 14:22 20:14	**functional**	**give** 8:21 9:12
19:23	48:10,15	31:16 32:15	10:2 28:4
familiar 14:21	**fires** 15:8 19:23	33:2 40:11,21	**given** 67:20
15:3 16:8,11	45:14,22 46:5	**functionality**	**go** 6:14 13:8
17:16 18:5,10	46:12	23:20 29:11,11	27:2 31:23
18:20 19:6,14	**first** 8:16 11:10	29:19 30:8	42:1 53:3 64:2
19:20 20:7,16	11:11 22:16	**functions** 31:2	66:20
21:4,10 22:17	32:11 56:25	**further** 4:7,11	**goal** 29:16
39:15,19 47:9	**five** 31:7 41:23	4:15 5:5 28:9	**goes** 48:18
48:23,24 49:12	41:24 43:11,12	28:12 50:4	**going** 6:2 10:17
51:17 55:4,6	43:18 44:3,16	65:8 67:8	21:19 23:16,21
55:17 56:4	51:10 52:7,14	68:10	27:16 37:20
57:11,15 58:18			

[going - initial]

39:5 53:24
54:8,11,13
56:10 64:6,9
67:2,5,18
good 6:1 8:12
group 12:10
13:24 14:15
26:13 35:20
44:3 51:9,17
52:19 53:1
guess 10:3,18
34:6 44:19

h

h 3:5 8:6 26:9
hand 68:15
happed 12:8
happen 47:2
happened
46:16
happens 18:6
47:13,15
hard 27:8
harold 41:13
hazard 14:22
hazards 25:11
34:23
head 9:13
heard 6:11
16:16 18:12
38:21 42:16
51:19
heat 59:15
held 1:18
hereinbefore
68:8

hereto 4:4,8
hereunto 68:14
hewlett 13:20
hi 67:7
high 11:5 36:19
36:21,25 63:5
higher 18:18
highlight 46:20
hollowell 1:5,5
1:6 2:21
honestly 42:1
62:15
hour 9:21
53:24
housed 26:11
houston 11:22
26:15
hp 1:10 2:9
3:10 6:20 8:2
14:1,1,15,20
16:12 18:16
19:7,21 20:1
20:18 22:13,21
22:24 23:3,5,8
23:21 24:1,10
26:10,12 28:9
29:17,19 30:2
30:21 31:3,5
31:14,15,17,18
32:15,16 33:2
33:15 34:11
35:11,25 36:2
37:7,14,23
38:2,2,4,7,17
39:20,24 40:2

40:9,11,12,21
44:21 45:20,24
47:3,13 49:6
49:13 50:12
51:11,17,18
52:1 53:9
54:24 55:5,18
56:13,21,21,25
61:23 62:5
65:14
hp's 56:16
hp01378 3:8
54:17
hp01379 55:12
hp01389 3:9
54:17

i

idea 10:22
37:15
ideas 30:4 37:1
37:25 38:14
identification
21:25 54:18
56:15 63:11
identify 35:6
44:21
identifying
38:7
identity 4:24
implement 47:3
63:7
implemented
46:20 49:6,13
50:7,8

implementing
65:9
implements
22:22
inc.'s 3:10
56:13
incidents 28:17
include 23:7
30:22 37:18
45:5,14
including 7:16
indicate 53:20
58:5
indicated 15:21
52:6
indicates 48:8
indicating
43:13
individually
1:4
industry 15:5,7
information
29:13 30:7
31:14 40:22
46:10 49:1
52:15 53:3,7
53:14,21 60:7
63:16,19 64:15
66:2
inherent 15:8
inhibit 57:7
58:23
initial 45:18
50:5

[injury - levites]   Page 9

injury 9:4
inquire 24:5,19
  24:25
inside 30:8
installed 47:15
  61:22
installing 36:1
  36:11 37:6
installs 47:14
institute 11:6
integrated 16:5
  21:12
intended 21:1
  45:22
interaction
  57:20 58:2,19
interested 7:11
  68:12
internal 18:11
internalizing
  37:11
internet 6:9
interrogatories
  3:11 56:14,17
interrogatory
  18:15
interrupt 58:8
investigating
  22:12
investigations
  44:24
involve 35:8
  38:10
involved 12:20
  13:11 32:22

  37:5 51:25
  52:2 62:6,8,9
  63:7
involvement
  61:21
ion 14:22 15:13
  15:20 19:23
  21:5 23:13
irving 11:7
issue 13:5 15:2
  15:4
issues 13:2 15:7
  34:16,17,21,21

j

january 68:22
jessica 1:5 2:21
jls 1:4 6:23
job 1:25 11:13
  37:21 53:15

k

kind 12:17
  14:18 20:11
knew 28:22
know 9:23
  16:16 18:25
  20:7,21 24:13
  25:7 26:7 28:8
  28:11,12,13
  29:3 32:8,22
  33:9 36:25
  46:8 47:6 48:2
  48:5,7,13
  50:20 59:7
  65:22

knowledge
  15:5 26:19
  29:5,10 31:10
  32:13 40:17
  47:3,12 52:3
  60:5
known 39:10

l

l 4:1,1 41:16
lack 25:12
  29:11 30:7
  45:7
lacked 29:19
  31:2 32:15
  33:2 34:19,25
  39:14,21 40:11
  40:20 41:3
  45:21 46:5,11
  59:18 60:19
  61:5 62:24
lacking 31:17
  33:15 42:6
  46:17 61:11
  65:1
lange 2:2 7:23
laptop 19:7,9
  19:12 31:18
  32:15 33:16
  34:11 36:2,12
  37:7,19 39:20
  40:11 46:18
  47:4,13,14,19
  50:16,25 51:11
  55:2 59:20
  61:13

laptops 31:3,15
  38:17 50:9,12
  61:23 62:8
law 5:2
lawyers 25:8
layman's 12:15
lead 15:9
leading 36:1
  41:19
learned 40:22
lee 10:7,9 53:4
  62:21
legal 2:21
  29:10
level 32:9,13
  35:6 36:19,21
  36:25 44:21
  48:19 63:6
levels 21:2 63:5
levites 2:12
  7:25 8:1 14:25
  15:14 16:14,23
  16:25 17:7,13
  18:21 19:9
  20:4,20 27:1,7
  27:11 33:4,17
  33:22 34:2
  35:15 36:4
  40:5,14,23
  41:5 42:10
  43:4,24 45:23
  48:16 49:15
  50:2,18 51:14
  53:18 54:5
  56:6 57:13,23

58:14 59:22
60:9,24 61:6
61:16,25 63:25
64:4 66:4,14
66:19,24 67:7
limitations
15:9
limited 10:6,7
line 22:10
23:17 24:7
lithium 14:22
15:13,20 19:22
21:5 23:13
litigation 5:3
8:25 22:14
23:20 24:11,24
25:10,16 29:7
29:8 39:8 43:2
52:22 54:23
55:3
llp 2:2,8,14 8:5
located 26:14
locations 4:19
locking 37:10
lockout 36:25
long 11:17 12:2
13:13 39:10
49:8,12
look 13:7 42:2
54:1
looked 17:25
looking 52:21

m

made 10:4
magnolia 8:7
mailed 5:8
make 9:13
17:12 37:22
38:1 50:11
making 38:10
management
20:9 21:17
manager 14:9
managing
21:15
manner 4:25
manufacture
22:25
manufactured
20:2 50:9
manufacturer
37:23
manufacturers
20:2,18 22:25
23:4
marcellin 1:3
6:20
maria 2:18 8:3
66:16
marked 5:6
21:25 22:1
54:14,18 55:12
56:11,14
marriage 68:12
mastriano 2:18
8:3,4 66:17,23

match 49:2
63:20 64:15,15
matter 1:15
6:19 68:13
mckay 1:5 2:21
mean 15:6,25
22:20 59:3
meaning 31:22
means 22:21
58:25 68:24
mechanically
36:24 37:14
38:5
media 6:16
67:21
meeting 39:25
41:1,10,17,19
41:22 42:2,4,7
42:8,14,15,17
42:24 44:2,7
44:17 52:14
61:9,19
meetings 32:25
32:25 42:18
members 41:8
memory 12:18
memos 43:22
mentioned 1:15
18:24 37:9
38:19 39:24
45:7 49:24
message 31:22
46:23 47:5,15
47:16,20 48:8
48:13,22 49:3

50:6 51:6
60:22 63:23
method 38:7
49:5,10
methodologies
62:15
methodology
37:3 46:20
51:21
methods 63:5
miller 2:14 8:4
minutes 54:3,6
66:15,22
mission 14:14
misspoke 48:12
mistake 17:12
mixture 34:20
mmastriano
2:18
months 11:18
motherboard
16:2,4,9,13,21
18:3,6,18,19
19:2,3,22 20:3
48:25 49:2
51:6 55:23
56:22 57:6,20
58:3,7,12 59:4
59:19,20 60:6
60:12,14,14,20
60:21 61:3
63:12,15,21,22
64:13,16
motherboards
12:1,1

[move - pack] Page 11

move 31:21	note 6:5	66:4,8	opposed 16:5
moved 12:10	notebook 8:23	objections 4:9	option 37:9
13:1 14:9	9:1,2 12:10,11	7:12 31:19	order 23:9
mu06062 3:8	12:14	occasion 52:6	organization
54:16,25	notes 1:14 54:1	occur 14:22	13:1
multiple 29:23	66:20 68:9	occurred 15:8	outcome 7:11
29:24 30:16	notices 42:2	33:13 39:1	68:13
64:25	noticing 7:19	41:20 43:1	outside 22:25
n	notify 51:22	47:8	23:4 24:11
n 2:1 3:1 4:1	notifying 51:11	occurring	25:10,16
68:1	52:2	20:10 24:22	overcharging
name 7:2 8:12	notwithstandi...	offered 12:17	21:5
26:6,6 27:17	57:1	officer 4:13,20	overheard
27:20 28:4	number 67:21	oh 17:19	32:21
nature 11:13	**o**	okay 9:18,19	overheat 14:23
33:21	o 4:1 8:6 26:9	9:24,25 11:9	overheating
necessarily	68:1	13:17 17:15	21:8 23:12
44:20	oath 4:13,21	18:25 19:15	overrule 34:7
necessary	7:8 26:23	20:13 21:19	own 20:3 37:19
22:22,23	objection 14:25	32:5 33:12	**p**
need 4:21	15:14 16:14,23	34:5 36:21	p 2:1,1 4:1 8:6
needed 50:21	17:5 18:21	37:15 42:13	8:6 26:9,9 27:9
needs 43:17	20:20 33:4,17	43:14 46:24	p.m. 6:3 54:8
53:3	33:21 34:7	48:7 54:2,4,22	54:12 64:6,10
never 22:7	35:15 36:4	55:11 63:9	67:2,6,18,25
new 1:1,18 2:5	40:5,14,23	64:4 65:21	p1-6836748
2:11,11,17	41:5 42:10	66:10,19	1:25
6:22 48:21	43:4,24 45:23	older 41:7 42:2	pack 16:6,9
68:2,3,6,22	46:1 48:16	once 8:20 59:13	18:17,20 19:4
newly 50:9	49:15 50:2,18	ones 65:3	21:12 23:5
nod 43:16	51:14 53:18	operating	30:21 38:12
non 44:21	56:6 57:1,13	29:19 46:18	48:25 49:1
north 2:16	57:23 58:14	operator 31:23	50:24 51:2,5
notary 1:17	59:22 60:9,24	opportunity	55:2 56:20,23
68:5,22	61:6,16,25	10:18	57:21 58:2,6

[pack - presenting]

59:5,17,18
60:23 61:5
63:17,20 64:14
64:14
packard 13:20
packs 15:12,20
19:21 20:2,17
20:18 22:13,18
23:1,9,19,22
24:2,17,23
25:5,12 29:6
29:12,18 30:9
30:13,15,15
31:1,1,16
32:14,17 33:1
33:14 34:10,18
34:25 36:9,13
38:17 39:14,20
40:10,13,20
41:3 42:6
44:25 45:4,21
46:5,11,17
52:22 55:5,22
60:19 61:10,20
62:24 65:1
page 3:2,6 22:3
22:10 23:17
24:7 27:16
55:12 56:21
part 21:11
24:13 35:23
36:5 37:4
38:22 62:20
participants
6:9

participating
4:20
particular
18:12 19:7,17
28:15 29:10
55:9 61:12
parties 4:4,8,16
5:1 6:14 68:11
party 7:9 25:20
30:9 44:19
passed 43:8
patent 9:5
pavilion 22:13
31:3
pc 12:1
pcs 14:19
peep 27:3,3,8
27:10
pending 9:24
17:22
people 14:9
25:3,25 26:3
38:23 41:22,23
41:25 51:22
53:8,14
perform 50:16
performed
15:18
period 14:9
19:2
peripherals
12:11,15
person 26:5
47:23

personal 9:4
phone 52:9
64:25
pillinger 2:14
8:4
pin 55:25 56:19
56:23 57:5
59:19 60:8
pinout 55:13
55:19
pins 55:22
pipho 1:8 3:3
6:18 8:12 26:6
26:11,16 28:5
28:8,10,15
29:5,14,23,25
30:7 31:11,13
32:1 54:13,19
61:18 64:12
66:13 67:20
place 4:22 6:13
11:10,11
plaintiff 6:19
plaintiff's 3:6
21:23 54:15
56:12
plaintiffs 1:7
2:3 3:10 7:24
8:13 56:13,16
please 6:5 7:13
17:4 26:8
33:21
plugged 61:4
pmtlawfirm.c...
2:18

poe 27:3,3,8,10
point 13:19
27:2 32:24
39:1 53:13
61:18
pop 31:21
46:24 47:5,15
47:20 48:8,13
48:21 50:6
60:22 63:23
position 12:2,5
12:23 13:15
possession 5:9
possible 30:5
50:22 61:1,8
possibly 32:8
44:20
potential 23:13
25:11 36:1
potentially
20:11 36:13
60:21
power 18:19
19:3 59:5
precisely 59:8
preparation
24:9
prepare 10:1
presence 34:22
present 2:20
4:16 7:15 41:1
44:7
presented 5:8
presenting 5:6

[pretty - read]   Page 13

pretty 10:5
prevalence
  31:8
prevalent
  44:19
prevent 15:12
  19:22 20:10
  23:12 29:18
  34:10 36:8
  45:22 46:5,12
preventing
  46:17
previous 10:6
  52:2
previously 10:4
  15:21 49:24
  50:12 52:20
prior 5:9 34:3
  49:8,10,14
  50:16 51:11
priority 7:3,6
  67:23
probably 9:21
  29:24 39:11
  41:11 60:3
  66:21
problem 20:12
  20:13 27:7
  28:23 29:1
  40:7,8 42:19
  43:23 51:11
  53:16 61:10
problems 14:18
  61:20

proceed 7:21
proceeding
  7:13
proceedings
  1:15
process 9:11
  22:12 23:21
  25:10 30:19
  43:3 58:11
produced 3:13
  54:23
products 23:24
  51:18
professional
  1:16 68:21
professionally
  11:20,21 37:20
programmed
  19:22 20:3,17
  35:13 51:5
  56:22
programming
  18:5 36:12
  37:6 61:12
proper 46:1
protect 45:11
protection
  30:18
provide 31:14
provided 18:16
  46:10 48:3
  52:16 53:8
  56:25
providing 9:10
  53:7

public 1:17
  68:5
purchaser
  37:19 47:13
purchasers
  38:17 52:2
purchases
  31:15
purely 24:11
purpose 5:3
  33:8
purposes 22:14
  23:23 24:23
  52:23
pursuant 4:16
pursuing 65:13
put 17:3 28:1
  47:7

q

qualify 35:25
quality 6:7,8
  13:1,13,16,25
  14:7,15 26:12
  26:12 32:22,24
  33:13 34:8,16
  34:17,21,21
  35:20 38:23
  39:6,24 41:4,7
  42:20,25 43:8
  43:19 44:3,17
  45:19 46:3,3
  46:10 49:23
  51:9,17 52:19
  57:17,19 61:9

query 48:25
  49:10 50:7
  64:13
question 4:9
  5:10 8:16 9:23
  17:8,10,21,22
  17:24 22:11,16
  23:18 24:8,12
  24:13,18,18
  25:6,15,18,21
  25:23 26:2,7
  26:10,14 27:17
  27:24 28:4,7
  28:14,20 29:4
  29:9,16,22,25
  30:6,11,17,22
  30:25 31:10,20
  32:11 33:23
  40:18 42:23
  45:17 49:11
  56:18 60:2,11
  62:2,4 64:1
questioning 5:9
questions 8:14
  22:5 24:3
  66:12,18 67:8

r

r 2:1 4:1 68:1
raised 30:3
reaction 61:4
read 10:19
  17:20,22 22:4
  22:7,8 31:25
  32:3 45:3

[reading - right]   Page 14

reading 22:6
  43:21
reads 56:18
ready 66:16
reason 26:16
recall 9:7 10:8
  19:13,16 27:17
  33:7,11 38:15
  38:18,23 39:4
  41:8,24 42:3
  42:13,18 43:7
  43:8,19 45:18
  50:13 51:23,25
  52:10 62:13
  64:17,24 65:3
  65:5
recalls 51:18,19
  51:21 52:3
receive 47:16
  60:16
receiving 60:15
recess 54:9
  67:3
recognize
  35:13 36:13
  48:22 49:9
recollection
  26:21,23 32:2
  32:7 43:20
  44:14 46:8,15
  47:10 52:8
  65:8
recollections
  32:5

record 6:3,15
  7:18 9:17 17:4
  54:8,11 64:6,7
  64:9 67:2,5,18
  68:9
recorded 4:25
  6:12,17
recording 4:25
  6:7,12
refer 21:17
referred 21:11
  34:2 46:25
referring 42:5
  45:11 50:23
refers 20:21,25
  56:5,8
refreshed 32:1
regard 8:25
  10:23 16:22
  18:1 20:1 23:4
  28:7 35:12
  44:24 53:9
  57:19 62:12
regarding 5:10
  51:11
registered
  51:22
registers 56:23
related 7:9 8:23
  13:9 34:18
  68:10
relates 50:25
relationship
  16:19

remained 13:25
remember
  27:20,20,21,22
  28:2,14 35:3
  63:3
remembering
  27:25
remote 4:19
remotely 4:23
  6:25 7:16
repairing 11:25
repeat 48:11
  62:2
rephrase 60:3,4
replace 37:12
  37:19
replicate 37:14
  37:23 38:2,11
replicated 38:8
report 58:6,10
  60:20
reported 15:7
  16:18 18:3
  19:1 47:20
  59:18
reporter 1:17
  4:18,23 7:5,20
  9:14,17 17:17
  43:17 67:13
  68:21,25
reporting
  16:20 30:14
reports 16:13
  18:17 58:12,22

represent 7:3
  54:22 55:1
represents 56:9
reproduction
  68:24
require 30:21
required 20:1
  20:18 23:8
  32:16 40:12
requires 19:21
  31:17
research 48:5
reserved 4:10
respective 4:4,8
responding
  64:14
response 49:10
  50:7
responsibility
  53:13 62:16
  66:2
result 20:11
  48:9,15
resulting 19:23
retained 67:22
return 63:16
reveal 44:23
reverse 37:17
review 10:12
  10:17
reviewing 10:3
revision 3:8
  54:16,25
right 21:19
  24:3 27:12

[right - sounds]   Page 15

28:6 32:10
35:9 36:16
38:25 45:14
47:11 49:20
51:1,6 53:17
53:23 63:2
65:19
road 2:4
rochester 2:5
role 9:9 12:4
  14:9 21:15
roll 11:23
  13:16
root 13:4
roughly 29:8
runaway 14:24
  15:12 23:13
ryan 2:21 7:2

s

s 1:3 2:1 3:5 4:1
  4:1 6:19 41:16
sacrifice 30:15
  30:20
sacrificing 45:4
safety 15:11,19
  16:11 19:20
  20:9 22:23
  23:8,11,23
  25:13 30:7,16
  30:18 31:2,17
  32:16 33:2,15
  34:19 35:1
  39:14,21 40:11
  40:20 41:3
  42:6 45:5,5,7

45:10,21 46:5
46:11,18 48:9
60:19 61:5,11
62:24 65:2
salina 2:16
saying 24:13
  26:21 28:22
  40:3 46:15
  65:7
says 56:1 57:1
  58:21
scalf 41:12,14
  41:17
scenario 21:8
school 11:5
schwarz 2:6
  3:3 7:22,23
  8:11,13 17:3,9
  17:15,19 19:11
  20:6 27:4,10
  27:14 33:20,24
  34:5 45:25
  53:23 60:1
  64:3 66:6,11
  67:15
science 11:8
scope 10:5
screen 6:11
  21:20 54:13
screwed 27:6
sealing 4:5
sec 64:2
second 27:8
  55:11

section 4:17
  55:13,13
see 21:21 29:17
  54:1,5,19,19,21
  55:15 56:2
  57:9 66:24
seek 48:25
seems 58:5
seen 6:10 55:8
send 51:5 63:15
  63:22
sending 61:14
  64:13
sense 59:20
senses 57:3
separate 4:19
  58:11 59:10
series 31:3 36:2
  37:7
set 3:10 56:14
  56:17 68:8,14
shake 9:13
share 21:19
  52:25 54:13
  66:2
shared 53:21
sharing 53:14
short 64:11
shorthand 68:9
show 54:14
  56:10
shut 47:24
  61:13
shutdown
  30:19

signal 60:15,16
  63:16
signals 61:14
signature 68:19
signed 4:12,14
  10:20 26:20
significant 31:9
significantly
  21:3
similar 23:21
  49:25
situation 8:24
situations
  15:13
six 11:18 31:7
  51:10 52:7
  62:23
software 37:2
  50:16,21,23,24
  50:24 51:1,2
sohmer 2:21
  7:2
sold 50:12
solution 61:12
solutions 42:19
solve 43:23
somewhat 18:9
sooner 9:22
sorry 24:21
  27:14 28:20
  48:11 62:2
sorts 15:12
sought 66:1
sounds 47:11

[south - technically] Page 16

south 2:4	states 1:1 6:21	supporting	**t**
speak 45:24	stating 47:16	13:2	t 2:18 3:5 4:1,1
spec 59:25	stenographic	supposed 60:20	68:1,1
specific 19:16	1:14	sure 7:22 11:6	take 6:13 9:14
27:21,23 28:2	stephen 2:6	48:12 52:4	9:17,20,21,22
34:14 37:4,6	steve 8:13	62:3 64:3	24:8 53:2,9,25
41:8 45:9	19:10 27:1	65:20 66:23	54:1,3 60:21
47:18 60:12	45:24 63:25	surveillance	taken 1:15 6:18
specifically	steven 7:22	11:12,15	28:9
27:20 34:12	stipulated 4:3,7	swear 7:20	talk 9:15,16
45:1 56:21	4:11,15 5:5	sworn 4:12,22	45:8 52:19
specification	stop 24:6 31:23	8:8 68:8	62:23
3:7 54:16,25	59:12,15	symbol 56:1	talked 25:25
55:1,9 58:16	stopped 59:13	syracuse 2:17	26:3 27:25
specifications	street 2:16	system 13:11	28:3 30:19
23:3,7 55:5,7	studied 23:22	15:23,24 16:1	52:6 63:9
specifics 18:23	24:23 47:18	16:2,12,18,20	64:20 65:25
spell 26:7 41:15	study 23:19	18:2 20:3	talking 10:9
spite 46:14	24:1,16,16	21:15 26:10	19:10 20:5,14
ss 68:2	subject 55:3	32:8 35:5 37:7	26:21 33:9
sschwarz 2:6	57:2	44:21 46:22	40:9 42:24
stamped 3:8	subjected 8:17	47:4 48:21	59:23 64:12,24
54:17	subsequent	60:12 63:15	65:21,22
standard 30:16	42:18	64:13 65:4	tarallo 2:14 8:5
30:17	substance 34:9	systems 11:16	team 13:9
staples 1:10	suite 2:4,10,16	19:8,10,12	32:23,24 33:13
2:15 6:20 8:5	summarize	29:20 35:9,11	39:24 41:4
start 22:6	11:4	35:21 36:2,17	42:20,25 43:8
32:10	summary 8:21	38:20 61:22	43:19 44:17
started 11:24	supervision	62:7,12 63:1	45:19 46:3,3
starting 23:17	68:24	63:14 64:20,24	46:10
state 1:17 7:13	supervisor 41:9	65:9	teams 41:7
7:16 68:2,6,22	supported		technically
statement 10:4	14:18		50:14,15 61:8

technician 11:25	31:25 34:1,3,4 67:19	**timbergreen** 8:6	**topics** 32:3 42:7,12
techniques 62:14	**testing** 12:11 12:14	**time** 4:10 7:14 12:18 14:9	**total** 67:21
technologies 11:12	**texas** 8:7 11:7 11:12	19:2,13 22:8 29:23 32:22	**transcript** 1:14 3:12,13 21:24 22:2,3,17
technology 7:1 11:7 15:9	**thank** 66:10,13 67:10,12,15	35:22 36:17 41:9 43:8	23:16 68:23
48:20 49:9,13 49:25 50:7,12	**thanks** 66:24	45:18,20 49:18 50:1 61:19	**trial** 4:10
58:19 60:13 61:2 63:10	**thermal** 14:24 15:12 23:13	62:3,5 63:10 65:14 67:11	**trouble** 27:24
64:20	30:18	**times** 8:19	**true** 68:9
tell 8:19 33:7	**thermistor** 16:12,17 18:17	29:23,24	**try** 9:12,15,15 9:16 15:12
36:21 44:10 45:2 62:11	56:1,22 57:3,4 58:6,12,21	**title** 14:6	42:2 43:23 46:16
temperature 16:17,20 18:2	59:18 60:7,19 61:13	**today** 7:5 8:15 10:2 24:9	**trying** 10:7 13:4 27:19,21
18:7,17,24 19:1 56:9,24	**thing** 12:24 38:4	26:24 67:10,14	27:22 28:1,2 34:9
57:4,6 59:3	**things** 12:19 36:20,22,24	**today's** 6:3	**turn** 19:3 55:11
temperatures 58:22	**think** 17:19 27:5 53:6,12	**together** 10:17	**turning** 18:19
ten 49:20 61:9	66:7,20	**told** 11:2 52:21	**two** 67:22
term 12:15 16:16 22:18,20	**thinking** 31:7	**toniann** 1:16 7:5 17:21 68:5	**type** 8:21 37:2 49:9
38:21	**third** 3:10 25:20 28:18	68:21	**types** 15:19 29:18 35:20
terminology 18:13	30:9 44:19 56:14,17	**took** 12:23 13:14 64:11	55:4 64:23
testified 8:8,22 10:23 36:5	**threshold** 18:7 19:1	**topic** 10:25 11:1 25:1	**typically** 13:8 16:1
45:3	**thresholds** 20:10	26:18,19,22 28:16 30:12	
testimony 10:2 10:13,19 18:15		35:4 42:7,14 43:10 44:3,5	**u**
22:4,7,8 26:23		44:11,15 52:7 52:10,13,15,20	**u** 4:1
		63:3,8 65:13	**unauthorized** 5:2 22:13,18 23:19,22 24:17 24:22 25:12 28:19 29:6,12

29:18 30:9
31:1 32:14
33:1,14 34:10
34:18,22,24
35:6,14 36:8
36:13 37:23
38:16 39:6,13
39:19 40:10
41:2 42:5
43:22 44:25
45:4,20 46:4
46:17,21 47:5
47:14,17,24
48:3,8,14,22
51:12 52:22
59:17 60:18
61:10,20 62:24
63:11 65:1
unaware 24:21
under 26:23
  68:24
understand
  9:12 10:5 13:4
  17:6 21:14
  28:25 45:10
  49:6 58:25
  59:21 60:2
understanding
  10:3 18:14
  20:24 21:1
  22:24 48:1
  53:8 65:12
understood
  25:22 53:13

unit 6:16 20:9
  21:18 24:10
  52:1
united 1:1 6:21
update 50:16
  50:21
upgrades 12:18
use 22:13 23:24
  25:19 36:8
  38:16 44:19,21
  48:14
used 5:3 16:12
  29:13 33:15
  34:11,25 36:18
  39:20 46:22
  47:5 51:21
  58:19 62:14
  67:21
user 37:11,18
  47:21 63:23
users 48:14
  51:12
uses 31:8
using 6:25
  25:11 48:8
  51:12
utilized 48:21

v

v 1:9 6:20 8:6
vague 26:22
  32:4,5,6,7
value 18:7
various 15:11
  20:9 35:20
  36:17

verbal 43:17
verbally 9:13
veritext 7:3,6
  67:23
versus 44:11
video 4:18,20
  4:24 6:12,17
videographer
  2:21 6:1 7:4
  54:7,10 64:5,8
  67:1,4,13,17
violation 5:2
virtual 6:25
virtually 1:18
  2:1 6:7
void 30:14
voltage 21:2

w

waived 4:6
waiving 57:2
want 9:15,20
  9:22 20:6 22:4
  22:6 25:7 27:2
  46:8 54:2
  55:11
warning 23:23
  46:22 48:2
warns 48:13
warranties
  51:22
warren 3:12
  21:24
way 34:3 46:16
  57:25 62:6
  68:12

ways 34:10
  38:15 43:23
we've 53:24
  56:11
wednesday
  1:18
went 11:6 66:8
western 1:1
  6:22
whereof 68:14
winton 2:4
withdraw
  40:18 42:23
  45:16 49:11
  62:4
witness 3:2
  4:21,22 5:7,8
  5:10 6:10 7:21
  27:13 54:4
  68:7,14
witness's 4:24
witnesses 4:19
worded 60:4
words 8:25
  14:16 25:9
  29:9 37:11
  38:1,6 45:2
  47:3 49:18
  51:4 57:17
  59:2
work 11:17
  12:2 13:6,13
  14:15 19:18
  24:14 29:10
  31:18 43:21

[work - york]   Page 19

55:18 57:18,19
worked   11:10
  11:11 16:22
works   26:12
written   5:1
wrong   17:10
  33:25
wrongful   9:4

x

x   1:3,12 3:1,5

y

yeah   10:7 28:1
  32:7 33:9,10
  38:18 41:7
  43:11 47:6
  50:4 57:15
year   45:19
years   14:4 26:1
  26:1 31:6,8
  33:10,12 35:12
  39:11 40:3,9
  40:19 41:2,20
  42:5,25 43:11
  43:12,18 44:4
  44:8,16 46:9
  49:19,20 51:9
  51:10 52:7,14
  61:9,19 62:23
yep   60:1
york   1:1,18 2:5
  2:11,11,17
  6:23 68:2,3,6
  68:22

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the

deponent or a party before the deposition is

completed, the deponent must be allowed 30 days

after being notified by the officer that the

transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to

sign a statement listing the changes and the

reasons for making them.

(2) Changes Indicated in the Officer's Certificate.

The officer must note in the certificate prescribed

by Rule 30(f)(1) whether a review was requested

and, if so, must attach any changes the deponent

makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES

ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1,

2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES

OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the

foregoing transcript is a true, correct and complete

transcript of the colloquies, questions and answers

as submitted by the court reporter. Veritext Legal

Solutions further represents that the attached

exhibits, if any, are true, correct and complete

documents as submitted by the court reporter and/or

attorneys in relation to this deposition and that

the documents were processed in accordance with

our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining

the confidentiality of client and witness information,

in accordance with the regulations promulgated under

the Health Insurance Portability and Accountability

Act (HIPAA), as amended with respect to protected

health information and the Gramm-Leach-Bliley Act, as

amended, with respect to Personally Identifiable

Information (PII). Physical transcripts and exhibits

are managed under strict facility and personnel access

controls. Electronic files of documents are stored

in encrypted form and are transmitted in an encrypted

fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.